SIZE MATTERS

CANADA'S BIGGER OIL BARREL

BY

Ron Craik

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The people and Province of Alberta

My youth was spent growing up in a small town in the Annapolis Valley in Nova Scotia during the 1960's and 1970's. Quite a unique upbringing and after finishing High School I decided to travel across Canada, at that time my preferred mode of transport was hitchhiking. My mom gave me $20 bucks, and off to the west on the TransCanada highway in June 1973, the adventure started. I ended up on a couch in a two-bedroom apartment on 24th Ave. SW, Calgary with friends from Nova Scotia. After graduation, all my peers moved to Alberta for jobs on oil rigs or in construction, they had no choice since there were no jobs in Nova Scotia. During that first summer, we dedicated several months to camping in Banff, Waterton, and several other provincial parks prior to returning home by hitchhiking.

This was the beginning of an annual migration that was made every April. Hitchhiking along the transcanada highway to Alberta to work in a coal mine for the summer and hitchhiking home in late August to go back to university in the winter. The following year, I stayed home after my dad passed away in May 1975. The following year found me hitchhiking to Alberta and beginning to work on the oil rigs each summer to pay for my B.Com. degree. Thus, a growing bond and gratitude towards what Alberta represented to me grew over my 25 years working in the Canadian oil patch.

These were the various positions worked: lease hand, roughneck, lead floorman (on doubles, triples, and drill ships) and a short stint working as a derrickman at the end of one summer before heading back to St. Mary's University. In my final year, I attended more than twenty interviews at the employment center but never received a call back. It made me question investing four years and thousands of dollars in a degree with student loans. After graduation I moved back to Calgary, Alberta to find a job and had two job offers within a week. I then worked for a major bank for the next two years as a Branch Accountant, Organizational Methods Analyst, and member of the Branch Audit Team. This was in the late 1970s, before the U.S. oil embargo. While working there, I could see the banking records of oil company employees and watched their incomes rise with

inflation, promotions, expense accounts, and company cars. I then returned to the oil patch and joined Johnston Testers, a division of Schlumberger. After training on downhole tools and production-testing equipment for wildcat exploration wells, I gained experience evaluating wells across Alberta, British Columbia, Saskatchewan, Manitoba, offshore Nova Scotia, Newfoundland, Labrador, North Sea, Africa, and South America.

I am especially grateful to Alberta—its people and its industry—for the career and learning opportunities it gave me. Sometimes I needed repetition since I learned a bit more slowly and am very grateful to still have all my fingers. As my first driller explained as his number ten boot hit me in the ass, “Don’t put your fingers there!”

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Introduction

Thank you for setting aside a little bit of your valuable personal time to read my book. The topic of the book “Size Matters” addresses one of my greatest pet peeves ever. That everyone in Canada chooses to accept our rating in Proven Oil Reserves as the third greatest in the world behind Venezuela at number one and Saudi Arabia in second place. My goal is for all Canadians to wake up to the fact that we have the *largest proven oil reserves* on this little blue planet called Earth.

Canadians are willing to sit back and let other experts from around the world do calculations and base these calculations on out and out lies. This happens when academics accept politicians' claims and book figures as fact, without verifying the data themselves. They often lack raw data, which is sometimes unavailable or already corrected to meet the reporting country, organization, or dictators’ goals.

A well-known parable tells of a young Canadian who, following an assault in a bar and while sprawled on the floor, simply comments, “Nice boots.” I challenge the claim that our oil *proven reserves* rank third and argue that Canada holds the world's largest oil reserves. Through my experience testing oil and gas wells on land and offshore in North America, North Sea, Africa, South America and talks with my fellow peers in the industry over the past quarter century I hope to create doubt about the current status quo or change a dozen or more viewpoints entirely.

After reading this book my hope is that any layman will be able to fact check and question Canada’s *third* place status for Oil Reserves. Further, it is important to convince **every Canadian politician** and/or leader, that they should not keep repeating this erroneous, third-rate message.

Size Matters

In all things, size matters. This has always been true throughout Earth's history. We often view Tyrannosaurus Rex as the biggest and most formidable dinosaur of the Jurassic period. The large marble structures of Greek, Roman or modern skyscrapers often follow this tenet. What city has the tallest building or who has scored the most hockey goals? We remember who won the gold medal but may have trouble recalling who won the bronze medal (just insert Canada here).

Individuals perceived as having more wealth, height, physical strength, or higher education often command increased respect and possess greater influence during negotiations. Current examples might include Mr. Putin at 5 ft. 7 inches exhibiting small man syndrome characteristics such as need to swagger, pose without a shirt on horseback. Or “Orange Man” who uses his personal space and flowerily, big words to describe his distorted exploits or exaggerations.

A Few Definitions

Proven Reserves - (also called proved reserves, P1) for oil refers to the estimated quantities of crude oil that, based on geological and engineering data, can be commercially recovered with reasonable certainty from known reservoirs under existing economic conditions, operating methods, and *government regulations*. This is the most conservative and widely accepted category of oil reserves, typically associated with a high degree of confidence—often defined as at least a 90% probability (P90) of actual recovery or better.

Key Elements of the Definition:

- Discovered and known reservoirs — The oil must be in identified, drilled, or otherwise confirmed accumulations (not prospective or undiscovered).

- Reasonable certainty — Achieved through analysis of seismic data, well logs, drillstem tests, production tests, and other evidence.
- Commercially recoverable — Extraction must be economically viable using current technology, at *prevailing prices and costs* (as of the evaluation date).
- From a given date forward — Reserves *exclude oil already produced*; they represent remaining recoverable volumes.

Probable Reserves - (2P = Proved + Probable): Additional volumes, with a better than 50% chance (≥50% probability) that the total (proved + probable) will be recovered or exceeded. These have moderate certainty.

Possible Reserves - (3P = Proved + Probable + Possible): Even lower-certainty volumes, with a 10% chance (P10) that the total (proved + probable + possible) will be recovered or exceeded. These reflect higher geological, technical, or economic risks.

Bullshit Poker - A casual bluffing game popular in bars (especially in Alberta during the 1970s), often played with $1 Dollar bills using their serial numbers as "poker hands". It is a precursor or variant of Liar's Poker, *emphasizing deception* over card luck – *bluffing* is not just allowed, *it is essential*.

OPEC – Organization of the Petroleum Exporting Countries. An entity to enforce "status quo" amongst its members for production and revenue streams for its member countries oil production. It most closely follows the rules of the Canadian drinking game of Bullshit Poker.

Brown Oil Fields – Producing oil fields that are in the *production decline phase* of life cycle.

Drillstem Test – A temporary well completion used to sample and measure flowrates, pressures and temperatures helping assess whether the well should be fully completed and produced.

Base Social Costing per Barrel – This refers to the expenses associated with social programs that are directly attributable to each barrel produced in each OPEC country and can be regarded as a component of the overall lifting cost.

Infill Drilling – Once the reservoir size has been determined, the most economical spacing and number of wells is planned, and the field is then drilled on a spacing grid.

Chapter One

A Brief History of Rapidly Growing Reserves

SAUDI ARABIA (OPEC)

Let us look at a 40-year review of Saudi Arabia's proven crude oil reserves (in billions of barrels, Bbbl), based on historical data:

Year	Proven Reserves (Bbbl)
1980	166.5 – Saudi government takes over picking reserve numbers.
1985	171.7
1988	169.6
1989	172.6
1990	260.3 - 90 Bbbl or 52% increase without any exploration wells drilled! Dam, that is good! Give that camel a bag of oats! This increase in reserves lacked geological support and is seen by *industry insiders* as a reclassification of *probable or possible reserves* to *proven reserves*.
1995	261.2
2000	262.8
2005	264.2
2010	264.2
2015	266.6
2020	297.5 (YCharts) – 30.9 Bbbl or 11% increase due to math error.

2021 258.6 (Country Economy) – 38.9 Bbbl decrease, first time in over 40 Years! This may have been a correction due to previous year's math error.

Sources

- Early 1980's figures (165 – 172 Bbbl) reflect field-by-field assessments. YCharts, Jordan Times, countryeconomy.com
- Between 1988 and 1990, reported reserves surged dramatically – from 170 Bbbl to 260 Bbbl, with no major new discoveries indicated.
- Since the early 1980s, Saudi Arabia's oil reserve figures have been reported exclusively by the Saudi government and Saudi Aramco. After Aramco was fully nationalized in 1980, detailed external field data disappeared, and reserve estimates came under sole government control. Before 1982, foreign partners and independent organizations helped verify these figures, but since then only government-issued numbers have been publicly available.
- From 1990 onward, reserves hovered between 260 – 265 Bbbl, rising slowly to 267 Bbbl by around 2015.
- YCharts reported a jump to 297.5 Bbbl in 2020.
- CountryEconomy, however, lists a decline to 258.6 Bbbl in 2021 countryeconomy.com

Notes:

The discrepancies – especially in recent years, highlight the inherent uncertainty in "proved reserve" accounting among OPEC members. No adjustment for the oil produced in over 25 years, approximately 118 Bbbls. How does that work and who does it benefit?

My estimate of Saudi Arabia's oil reserves would be at most 267 Bbbls. Taking away the oil produced would leave 149 Bbbls. **At this rate of production, about 30 years remain.**

VENEZUELA (OPEC)

A year-by-year record of Venezuela's proven oil reserves from 1990 to the present is difficult to compile because no international authority, such as the EIA, OPEC, or BP Statistical Review, provides the data in a consistent public table.

Proven Reserves Reported at Points in Time

1980's

- In this decade, estimates of Venezuela's proven oil reserves were much lower than today. Independent analysis suggested around 60 billion barrels in the 1980s and 1990s.
- In the early 2000s, Venezuela's own reporting of reserves grew sharply not because of new discoveries, but because the state oil company reclassified massive quantities of heavy oil from the Faja del Orinco as "proved".
- Official figures tripled from about **100 million barrels in 2007 to 296 – 300 billion barrels by around 2010 – 2014** after the local dictator's reclassification of Orinco Belt extra-heavy oil.

2010's - Present

- From the **2010's through the present**, Venezuela's proven reserve estimates have remained remarkably high – reported in the **300 plus billion barrels range**.
- Recent data (as of the early 2020's) show 303-304 **billion barrels of proven crude reserves,** which if believed would rank largest in the world.

Summary Table

(Based on numbers supplied by Venezuelan officials)

Year	Value given as Proven Oil Reserves
1980s	- 60 billion barrels (estimated)
2007	- 100 billion barrels (official government number, **40 Bbbl increase**)
2010 – 2014	- 300 billion barrels (official number, **196 Bbbl increase**)
2023 – 2025	- 303 - 304 Bbbl (EIA, OPEC reporting)

Notes:

Venezuela's reported *proven reserves* are often much higher than independent estimates, as heavy crude (dirtier than Albertas) from the Orinoco Belt was reclassified from "Probable" to "Proven" for OPEC reporting - a move viewed *skeptically* by many analysts. I view this as creative accounting and dictator puffing, acceptable for OPEC standards and status.

A skeptical reader might question the value of 300 billion bbls as reported in 2014. The 196 Bbbl increase in 2010 is probably a follow through from Canada who increased their Proven Oil Reserves from 5 Bbbl in 2000 to over 170 Bbbl in 2003 (oil Sands).

My estimate of **Venezuela's Proven oil reserves would be around 100 Bbbl**, based on the definitions. I would put the next 100 Bbbl as Probable Reserves. Their infrastructure has been failing over the past 20 years of dictatorship. The money for maintenance has been siphoned off, and their production levels have dropped because of this, to one third of their recorded highs.

The United States may be successful in re-vitalizing their oil industry over the next decade depending on how much they want to spend

(100's of billions) and how involved they want to become in running Venezuela, permanent boots on ground. Another possible success story in their history of helping lesser developed countries with their resources. No 51st Statehood offered there!

IRAN (OPEC)

Iran's proven oil reserves over the past two decades cannot be stated with confidence. Estimates placed them at about 58 billion barrels in 1980, rising to roughly 99 billion in 2001. They then increased by about 30 billion barrels to around 130 billion in 2002, and by another 30 billion to 157 billion in 2015. In 2020, OPEC publications reported a further jump of 51 billion barrels, bringing the total to about 208 billion or just ahead of Canada. Since then, Iran's reserves have generally been reported at around 208 billion barrels with little to no change. *OPEC Reports and IranOilGas N*

NOTES:

- A skeptical reader could reasonably conclude that Iran's proven reserves reflect pre-OPEC, self-reported figures and remained near 160 Bbbl in 2020. These numbers also appear to omit depletion from decades of ongoing production.
- Their produced oil since 1980 is approximately 60 Bbbl.
- This would put their current reserves around 100Bbbl.
- Current production is 4.5 Bbbl per year (before USA decided to aid them).
- My best guess is that they have **22 years of production left** at current rates. That 22 years of production is now going to be extended somewhat as their production capacity has recently been compromised (blown up).

CANADA (NON-OPEC)

Canadas' *proven oil reserves* (in billion barrels) from 1980 through to 2002 remained in the five Bbbl range showing yearly declines due to the oil produced each year. This is what you would expect to happen. However, in 2003 our reserves of Proven Oil jumped to 180 Bbbl due to the inclusion of oil sands. This set off a bit of shuffling for the "Bragging" rights for larger reserves and production quotas among OPEC members. Let us look at the numbers for proven reserves from 2003 to present day.

- 2005 -180 billion barrels of oil
- 2006 -179.6 Bbbls
- 2007 -178.8 Bbbls
- 2008 -176.4 Bbbls
- 2009 -175.0 Bbbls
- 2010 -174.8 Bbbls
- 2011 -174.1 Bbbls
- 2012 -173.7 Bbbls
- 2013 -173.0 Bbbls
- 2014 -172.2 Bbbls
- 2015 -171.5 Bbbls
- 2016 -170.5 Bbbls
- 2017 -171.8 Bbbls
- 2018 -170.7 Bbbls
- 2019 -169.1 Bbbls

- 2020 -168.1 Bbbls
- 2021 -170.3 Bbbl
- 2022 Data not reported. Annual EIA/NRCAN estimates.
- 2023 -163 Bbbls (or similar)
- 2024 -163 Bbbls EIA update for 2024 gives 163 Bbbls
- 2025 -163 (estimate) Worldometer and EIA estimate
- 2026 -177 (re-evaluation by Alberta bureaucrats)

The inclusion of Alberta oil sands (bitumen, black gold, or Texas tea) into "proved reserves" accounting caused a dramatic jump to 180 Bbbl for Canada in 2004. This was done because oilsands in the context of being both technically and economically recoverable was published, reviewed, and accepted as such. We have developed the technology and have commercialized it. These are Publicly Traded companies that have done the research and invested the time and money needed to be able to finance their production, future expansion, and development of this huge resource.

Notes:

- Oil reserves fell from 180 Bbbl to 163 Bbbl over 20 years due to production of 17 Bbbl.

- These are audited, reviewed, published numbers not associated in any way with OPEC.

- No one was playing “Bullshit Poker” with these numbers. In a “Canadian” way, *too honest and almost apologetic* for being published.

- The declining balance each year is reflected in the subtraction of the oil produced that year.

- The Proven numbers have not been updated since 2003. This is over 23 years!

- Canada may have well more than 300 years of oil production at our current rates!!!

- **Canada may have over 500 Bbbls of possible Proven Oil Reserves which I will discuss in detail a little later in this book (*spoiler alert* – if you are impatient just go to Chapter 9 on page 124).**

Chapter Summary

We have looked at the Oil Reserve numbers for the four countries who have reported the largest Proven Reserves for our planet. Looking at their histories over the past forty years it is obvious that a direct comparison or acceptance of any of these “numbers” is problematic at the least and absurd to use in any calculation of who can pump the most oil, who can actually produce the greatest volume over time or who has the most oil left in the ground.

- Saudi Arabia can increase the amount of oil that they can pump and load onto tankers in a matter of weeks (excess pumping capacity). This is different from reserves in the ground. **Thirty years of production left, at current depletion rates by my estimates.**

- Iran has political limitations and comes in second behind Saudi Arabia on all measured parameters. Except their ability to play "Bullshit Poker"? **Twenty-two years of production left at current rates by my estimates (prior to bombing).**

- Venezuela has claimed to hold the largest proven oil reserves in the world, but I would place their proved oil reserves at about 100 Bbbls using the definitions previously listed in this book. I think the extra 200 Bbbls increase was just a reclassification from probable to proven reserves to justify their standing within OPEC and to give OPEC biggest reserve status! **At their current rates of production this would give them a 100-year supply at one Bbbl per year.** The United States may opt to change this, most likely to increase back up to at least the higher previous levels of production so they have an alternative to Canadian supply at discount. This will cost billions of dollars and ten to fifteen years to construct.

- Canada's handling of our oil and gas resource is *pathetic*. Ultimately, we may have over 500 Bbbls of possible proven oil reserves. That would be 400 Bbbls more than Venezuela and **at current rates of production gives us a 230-year supply**. Currently Canada produces six times more oil than Venezuela per day. Our only limitation is the Federal government's blocking Alberta heavy oil pipelines to tidewater, until Carbon Credit *tax* is structured and in place.

The next Chapter will cover OPEC and how they are run by member politics. Let us see how they officially produce values that are accepted by scholars, economists, mainstream media, politicians and then regurgitated for the world populations who could care less once their phones have been turned on each day!

Chapter Two

OPEC

OPEC sets production quotas through negotiation and consensus. This process highlights my crucial point: size matters, both in proven reserves and in the ability to raise output for short periods. Another factor, though rarely stated openly, is what I call Bullshit Poker. Here is a basic outline of how OPEC members negotiate:

1. **Overall production target is set first**. At ministerial meetings, OPEC members agree on a total production ceiling for the group. This decision is driven by:

    - Global oil demand forecasts. These forecasts are not done by OPEC alone.
    - Inventory levels in major consuming countries.
    - Oil Prices and market volatility.
    - Non-OPEC supply, especially U.S. shale (horizontal wells and fracking).
    - Geopolitical risks and economic conditions.

    This group target comes first. Individual country quotas come after.

2. **Country "reference levels" are used.** Each member has an informal baseline or reference level, usually based on:

    - Recent historical production.
    - Verified capacity estimates. Doubt if there are site inspections being carried out.

- Independent secondary-source data, not self-reported numbers. Not sure where OPEC members would get this information. If my numbers are bogus then it may be counter intuitive to point the finger at someone else's phony numbers.

Cuts or increases are then applied **proportionally or selectively** to those baselines.

3. **Quotas are negotiated, not automatically set. There is no strict mathematical formula**. Instead, quotas are shaped by negotiations that consider:

   - **Production capacity.**

   Countries that can realistically pump more oil often get higher quotas, such as Saudi Arabia.

   - **Economic dependance on oil.**

   States that rely heavily on oil revenue sometimes argue for softer cuts.

   - **Compliance history.**

   Countries with poor past compliance may face pressure or scrutiny.

   - **Exceptional circumstances.**

   Countries with poor past compliance may face pressure or scrutiny.

4. **Special Treatment and Exemptions.** Some members are **temporarily exempt** from quotas due to:

   - Sanctions (for example Iran, Venezuela at various times).

   - Civil conflict or instability (for example Libya).

   These exemptions shift more of the burden onto other members.

5. **Monitoring and Compliance.** OPEC does not enforce quotas with legal penalties. Instead, it relies on:

    - Monthly production monitoring.
    - Public reporting LOL.
    - Political pressure and diplomacy (shame and guilt).

    Countries that over produce may later be asked to make "compensation cuts."

6. **OPEC+ complicates the system.** Since 2016, OPEC coordinates with non-members, most importantly Russia.

    - OPEC sets its internal allocations.
    - Non-OPEC partners negotiate parallel commitments.
    - The combined total is managed together.

Quota setting is often unstable and politicized because it lacks legal enforcement. Factors like capacity, market demands, sanctions, instability, and diplomatic bias make it challenging for members to reach agreements.

Cheating

Some OPEC members exceed their quotas more often than others because their incentives, risks, and constraints differ widely. The issue is driven less by ethics than by economic pressure, production capacity, and internal OPEC politics. Here is a brief overview:

1. **Fiscal desperation**. Countries with the following have a much stronger incentive to overproduce:

    - *High Debt.* – Gulf members with higher production have lower debt compared to the African members.
    - *Weak currencies*.
    - *Limited foreign currency reserves*.
    - *Budgets reliant on oil*. OPEC members, including Saudi Arabia, depend on high oil prices to balance their budgets. Saudi Arabia's 2025 fiscal breakeven price is estimated at about $90–$100 per barrel. To limit inflation, it has kept gasoline prices near $0.60 USD per liter—about 80 Canadian cents, or roughly one-third the cost of filling a car in Canada. Add free universal healthcare and a shortage of skilled local labor, and the fiscal pressure becomes clear.

    For the smaller OPEC producers an extra 50,000 to 200,000 barrels per day can mean paying salaries, avoiding **social unrest,** or stabilizing their currency. When their leaders are desperate to maintain control, quota discipline declines and sneaky oil tanker shipments are made. Someone needs a "Bigger" mega Yacht!

A *Small* Mega Yacht!

These yachts are floating palaces owned by billionaires—think multiple pools, gyms, cinemas, tenders, and crew quarters for dozens of staff. Image created by AI.

2. **“Pump it while you can” logic.**

   Some producers believe that their oil may be stranded in the future due to energy transition away from fossil fuels (this is foolish as their reserves will be depleted long before the demand for oil is gone). Their reserves are politically or geologically vulnerable. They have no way to replace this income stream in the medium term, but they may be forced to re-invent their economies as: financial centers, tax haven, shopping mecca, or some high-end status place to live (all have been proven to be susceptible to missile strikes recently). No amount of SPF 50 sunscreen will provide sufficient protection in that environment.

3. **Weak enforcement.**

   OPEC has no legal enforcement mechanisms such as:

   - No fines.
   - No export bans.
   - No binding contracts.

   This creates an environment where *cheating is a low-risk, high reward behavior*, especially in tight markets. The worst consequence is diplomatic pressure or future compensatory cuts, which take time to implement.

   Saudi Arabia, as OPEC’s largest producer, *with the most, spare pumping capacity*, has historically acted as the “enforcer” (adjusting output to balance supply and prices). When compliance falters—due to cheating on agreed quotas—Saudi Arabia has threatened or executed production surges to drive down prices, pressuring violators to return to the fold. This tactic harms everyone (including Saudi Arabia) in the short term but leverages its lower-cost production (not counting base social cost loading for its people) and financial resilience to outlast others. Some historical examples:

- **Mid-1980s Oil Glut/Price War (1985–1986)**: Frustrated by repeated quota cheating and overproduction by other OPEC members during the 1980s oil glut, Saudi Arabia expanded its role as swing producer. It sharply increased output, from about 5 million to more than 10 million barrels per day within months, flooding the market and driving prices below $10 per barrel. The move punished cheaters squeezed high-cost producers and aimed to restore discipline and market share. It was also costly for Saudi Arabia, as revenues fell sharply, but it partly succeeded in curbing non-compliance. In Alberta, the resulting oversupply severely reduced drilling activity.

- **Late 1990s**: Similar dynamics played out, with Saudi Arabia increasing production to counter excessive cheating and low prices.

- **2014–2016 Oil Price Crash**: Facing booming U.S. shale output eroding OPEC's market share, Saudi Arabia (under then-Oil Minister Ali al-Naimi) led OPEC in refusing cuts and maintaining/increasing production. This flooded the market, driving prices from over $100 to below $30/barrel. The goal was to squeeze high-cost shale producers USA (and indirectly enforce OPEC unity), though it also hurt OPEC revenues severely. Former Saudi officials later claimed it "won" by forcing shale adjustments (what is a shale adjustment?) from the United States.

- **2020 Russia-Saudi Price War**: When Russia (a key OPEC+ partner) refused additional cuts amid COVID-19 demand collapsed, Saudi Arabia retaliated by slashing prices and surging output (up to 12 million bpd). Prices crashed to

historic lows ($10–$20/barrel briefly). This pressured Russia back into compliance, leading to a major OPEC+ cut deal in April 2020.

- **Recent Examples (2024–2025)**: Overproduction by members such as Kazakhstan, Iraq, and the UAE led Saudi Arabia to support a faster unwinding of cuts and higher group output, including an increase of 411,000 bpd in May 2025, with more planned. Sources describe this as Riyadh using lower prices to pressure overproducers into better compliance. In 2025, despite weak demand and low prices, OPEC+ continued easing cuts partly to reinforce that warning.

Context and Limitations

This enforcement tool is blunt. Saudi Arabia's main leverage is its willingness to absorb the costs of price wars since it cannot directly sanction other members. Cheating remains common in OPEC and OPEC+, often through persistent overproduction, and enforcement remains weak. Saudi Arabia usually tolerates minor deviations but responds more forcefully to repeated or serious non-compliance.

These actions combine economic strategy with cartel discipline, even though OPEC operates more as a loose coordinating group than a tightly controlled cartel. Sources such as Reuters, Bloomberg, academic studies, and the Cato Institute often describe Saudi production surges as a means of enforcing compliance. In Alberta, the effects can be severe, reinforcing boom-and-bust cycles that Canada cannot control, especially when it fails to secure the highest-value use of its energy resources.

4. Limited spare capacity means limited flexibility.

Countries *without spare capacity* often cheat less because they physically cannot produce more. Countries with moderate spare capacity are most likely to cheat:

- They have enough spare capacity to increase output quietly.
- They are *not large enough to move prices* dramatically and attract attention.

5. **Domestic politics override OPEC politics**. In some countries National oil companies fund government budgets directly.

    - Leaders / Dictators face protests or internal power struggles.

    - **Sanctions and gray exports blur the line.** Sanctioned countries often rely on shadow shipping networks and unofficial reporting channels, making cheating harder to track and easier to deny. OPEC functions not because all members fully comply, but because enough major producers comply enough of the time to influence prices. In that sense, cheating is tolerated, managed, and folded into the system.

Summary

OPEC's *Proven Reserve* figures have been arbitrarily adjusted upwards over decades, yet their process remains closed and lacks public oversight from the rest of the world. Their data and methods have never been directly challenged, and as a result, Canada has experienced difficulties due to this lack of accountability. This situation complicates short-term management and planning for Canadian oil production and the industry. It is time for Canada to act, ensuring it does not leave its oil reserves untapped, and contribute to global stability as an alternative to dictatorships and extreme regimes **(increased Canadian pipeline capacity is the answer)**. The “WHO’s” need to start shouting so that the rest of the world knows we are here!

Chapter Three

A Deeper Discussion

The book's opening chapter discusses oil reserve history across four major countries, but it can be complex and hard to follow. Experts and organizations often make unverifiable statements about reserve increases, which media outlets repeat without proper sources or explanations; these figures then become standard accepted data. After decades working directly in the oilfield, I remain skeptical of reported “Proven Reserves.” **News coverage frequently contradicts my firsthand experience**, for example:

On October 28, 1980, Finance Minister Allan MacEachen introduced the National Energy Program (NEP) under Pierre Trudeau in response to global oil price shocks. The NEP aimed to increase Canadian ownership in the oil industry, stabilize consumer energy prices, promote national self-sufficiency, and discourage corporate head offices from moving from eastern Canada to Calgary. Of those four goals, which one was actually achieved?

The program *capped domestic oil prices below world levels*, imposed new taxes, and redirected revenue from Alberta to other regions, leading to reduced profits, decreased investment, capital flight, and significant job losses in Alberta. While Canadian control of the industry increased and oilsands projects benefitted from incentives, conventional oil production in Alberta suffered. The NEP deepened western alienation, triggered political backlash, and fueled separatist sentiments. It was phased out by 1985, replaced by the Western Accord. Although it met some nationalist goals, the NEP is largely remembered for its negative economic impact on Alberta and federal-provincial tensions and the author’s life.

Many foreign oil companies reduced or moved operations to the U.S., leading to a sharp rise in Alberta's unemployment (from about 3.7% to 12.4%), a 150% spike in bankruptcies, and tens of thousands of job

losses. Alberta lost an estimated $50–100 billion in revenue, partly due to the early 1980s recession and falling global oil prices.

At that time, I was the personnel manager for an oilfield service company with our headquarters in downtown Calgary. I was called in to the Regional Managers office and my boss requested that I make a hitlist. Bob was from Texas with a heavy drawl, so my question to him was, "What's a hitlist, eh"? Typical Canadian right? He looked at me funnily and asked me to sit with him at the conference table in his office. Bob explained to me that we had too many folks on the payroll and he wanted me to go through each operating base and size up who was expendable, put them on the list of people to be let go. In less than a year we went down from 130 people (mostly based in Alberta) to 45 in total. I put every effort into analysis of who were the best employees to keep and who were total "deadwood" and could be laid off immediately. My hitlist was approved by our Regional Manager of Canada, sent to our company headquarters in Sugarland, Texas and then to corporate head office in New York.

The revised list was sent back and as Bob and I reviewed it we became aware the priorities had been totally shifted. American head office "Bean Counters" had used different priorities. Employees who were getting close to being eligible for-profit sharing were put at the top of the list. The next group consisted of anyone who was getting close to qualifying for the pension plan. Removing these two groups hit the viability of the company extremely hard. The vesting group (after two years of employment) for profit sharing took out a bunch of very diligent, smart, and loyal field people who made the reputation of the company. The vesting pension group took out the younger managers who were the future growth of the company. What was left was an incredibly low performing group (the deadwood) and **doomed the future** of the Canadian operations of our division.

Commuting to our downtown office over the next few months, drilling rigs could be seen on McCloud Trail every day loaded onto convoys of trucks heading south to the American border. That stream of trucks turned into a river of oilfield equipment and ended up backing up every border crossing from Saskatchewan to British Columbia. It was a "Gift" to

the Americans! American rigs were older, in disrepair, and less safe than the newer, well-designed Albertan rigs, which featured wing walls, steam plants, larger doghouses, and more efficient, safer designs. The *equipment never came back*. The jobs lost took years to rise back to those same levels. The news media in Canada did a poor job of showing the devastation of the western economy. The Prime minister at that time was still Pierre Trudeau and when asked about all the rigs leaving for the states his reply was to state that, "*I am not aware of any rigs leaving*!"

You might wonder how this next story connects to the theme of "Size Matters." After graduating, I took a job with one of Canada's leading banks. At one point, I was assigned to a branch directly across from Dome Petroleum's offices on 7th Avenue, SW. Eventually, the branch shut down because the bank bought the entire block, intending to demolish it and construct two new office towers. They built one tower, which eventually became the Alberta head office for the bank. Rumor had it they were planning another tower—one that would be the *tallest building* in downtown Calgary. The bank was to relocate its head office from eastern Canada to Calgary, a move poised to deliver a significant blow to the existing power structure back east—a major bank transferring its headquarters to Alberta! Most people think that the National Energy Program was just after Alberta's oil revenue. Too bad, since I might suggest that its main objective was to pull the rug out from under any major companies thinking of moving head offices to Calgary. The second tower was never built and rumors about any major companies moving to Alberta vanished. The part of the block that was to have a second tower is still there on the Southeast corner. It was turned into a park with benches, and the support column bases have planters on top. You can check it out on Google Earth. Why go to such lengths to stop Calgary and Alberta from growing? Was Alberta getting too big? Funnily enough OPEC got into a snit within a year and started pumping oil like crazy! The price of oil crashed again, and the world economy went into a recession. No need for the NEP when OPEC could do the job.

Had the NEP not been implemented, Alberta likely would have experienced continued prosperity, with additional office towers

constructed and increased migration of companies from the east. At least another year and a half until OPEC struck. The Alberta stock exchange could have remained more viable, particularly through its "Blind Pools" used for raising capital for emerging technology and oil and gas junior firms. A more diversified economic base would have resulted.

Hence my skepticism for statements and numbers from political institutions, including our own. Here is another important example: My professional background focused on drillstem testing (DST) for exploration wells, where I closely watched how successful DSTs impacted oil company news and stock prices. In our Flowpetrol Division, we built a powerful reputation for outstanding well evaluation, sending expert test crews to various locations around the globe. Working with colleagues from different countries, I learned that OPEC nations in the Middle East had stopped conducting DSTs. When I asked about this change, I discovered it was because they had moved from exploration drilling to **in-fill drilling** to boost production, which made perfect sense. Saudi Arabia and Iran particularly caught my attention; their Proven Oil Reserve numbers seemed to regularly increase. Occasionally, they announced a new reservoir and major discovery, but most of the time, there was not any information available to link these increases to an actual new reservoir. In the case that they did announce a new field, it would be *suspiciously close* to their older fields. So, I learned back in the 1990's that OPEC numbers were more than a little fishy!

Over the past two decades, the Canadian oil industry has lacked a strong advocate. There has been an absence of effective representation to protect this significant sector—Canada's largest industry and exporter—from both domestic policy challenges and global events. Industry organizations tasked with representing companies and workers have not been successful in advancing these interests through lobbying efforts. Factors such as regional focus, limited media coverage, a lack of understanding from non-oil-producing provinces, and a smaller share of the national electorate have all contributed to the industry's disproportionate difficulties. As a result, not only the oil sector but Canada has been adversely affected.

Current ranking (2026 projection, consistent with recent years) from IBISWorld confirms:

1. CDN Oil Drilling & Gas Extraction: $153.5B in exports (by far the largest).
2. CDN Automobile & Light-Duty Motor Vehicle Manufacturing: $47.6B.
3. CDN Petroleum Refining: $25.7B.

Overall Pattern

- Energy's growth: Dramatic long-term rise (from $50B in 2000 to $197B in 2024), driven by volume increases in oil sands and global demand. Highly volatile due to oil prices but upward trend overall. It now accounts for roughly 25–30% of total goods exports.
- **Automotive decline** (relative): Peaked early 2000s; now much smaller due to global competition, offshoring, and supply chain shifts.
- Other sectors: Forestry, metals/minerals, and agriculture remain important but secondary. Total Canadian goods exports grew from $400B CAD in early 2000s to $720–780B recently (goods + services higher).

In short: *Oil and Gas Extraction has been Canada's largest exporting industry for nearly the entire past 20 years*, with a clear upward (though price-sensitive) trend that solidified its lead. Data comes primarily from Statistics Canada merchandise trade tables and industry analyses.

Quick math shows Oil & Gas extraction $ 153.5 Billion plus Petroleum Refining $ 25.7 Billion which equals $ 179.2 Billion. Automobile & Light duty Motor Vehicle Manufacturing of $47.6 Billion represents just 26.6% of the dollar value from the oil and gas industry!

In conducting a comparison, it is important to evaluate the strength and accomplishments demonstrated by the Canadian automotive

industry. No Canadian politician or citizen can voice disapproval. So why is an assembly line worker in a plant in Quebec or Ontario valued 6.7 times more than a roughneck working outside at minus twenty on the prairie? They are not worth more, they do not produce more, and the only difference is on which side of a Provincial border they are working. More **votes**, strong lobbyists, and *bigger* populations. *Size matters*.

A review of current policy indicates that exploration for oil and gas is currently prohibited off the west coast of Canada, specifically in the offshore waters adjacent to British Columbia. This restriction arises from a longstanding federal moratorium on offshore oil and gas activities, first implemented in 1972, which continues to prevent new exploration and development in this region. Although the provincial government instituted its own moratorium in 1989 and lifted it in the early 2000s to promote responsible development, the federal ban has remained in effect, superseding provincial initiatives and effectively halting any such activity. It is noteworthy that at the time these prohibitions were enacted, offshore exploration and production technologies were in their infancy—space exploration had only recently achieved the milestone of landing on the moon three years prior. British Columbia *lacked the expertise and maturity, (might apply today!)* to manage this potential resource off the Canadian west coast.

In February 2024, the Canadian government concluded a process in which *all remaining 227 offshore oil and gas exploration and production permits* off the Pacific coast were voluntarily? *forced to be* relinquished by companies including Chevron and ExxonMobil. This action removed all active permits from the region, reinforcing the moratorium's strength and **lost opportunity** for Canada. Importantly, key stakeholders such as the Alberta provincial government and major oil and gas industry actors were not extensively consulted prior or listened to during this process. Over the past five decades, technological advancements in offshore exploration and development have been significant, even now we are continuing *to advance towards human settlement on Mars.* One could reasonably conclude that educated, reasonable people armed with newer technology and experience could map and do evaluations of hydrocarbon potential off

the west coast of B.C. without any risk of harm to the marine environment. The intended objective of this moratorium has now been successfully accomplished. Let the thinking people move on!

This policy decision aligns with a broader framework of environmental protection, following legal challenges from advocacy organizations like *Ecojustice*. Recent discussions, including those in late 2025 involving a memorandum of understanding (MOU) between the federal government and Alberta, have primarily addressed potential modifications to the Oil Tanker Moratorium Act (Bill C-48, enacted in 2019), which prohibits large crude oil tankers from operating along BC's north coast. While this tanker ban does not directly restrict exploration, it impedes commercial development by limiting viable transportation options. Notably, the current discussions are centered on facilitating pipeline infrastructure for Alberta oil exports, rather than repealing the federal moratorium on offshore exploration.

In practical terms **every drop of oil produced from Alaska** (primarily Alaska North Slope crude from the Trans-Alaska Pipeline System's Valdez Marine Terminal) has been shipped by tanker south along the British Columbia coast to refineries in Washington State (Puget Sound area, including Cherry Point, March Point/Anacortes, Ferndale, etc.) for decades—since the late 1970s following the pipeline's completion. These tankers follow *established routes*: they travel offshore down the Gulf of Alaska, then around the west side of Haida Gwaii (due to a voluntary Tanker Exclusion Zone and Canada's Oil Tanker Moratorium Act on the north coast, which prohibits laden crude tankers from using the Inside Passage or northern inshore routes). They then proceed south along Vancouver Island's outer coast **before entering the Strait of Juan de Fuca (shared U.S.-Canada waters)** to reach Washington refineries. *Just to identify where this is, it passes Victoria and Vancouver and culminates just across the bay from White Rock, BC.* This route has been in place for over 60 years, with no major spills from these transits. Exact historical cumulative numbers of "tanker loads" (i.e., individual tanker voyages or shipments) are not publicly tallied in a single comprehensive figure, as

tracking focuses more on volumes (barrels) rather than trip counts. However, recent, and historical data provide strong estimates:

- Annual tanker transits for Alaskan crude to Puget Sound/Washington have been in the range of 200–300+ per year in various periods. For example:

    1. Older estimates (around 2010s–2020s) cited 200–230 oil tankers per year transiting along B.C.'s coast carrying Alaskan crude south.

    2. Washington State Department of Ecology data for inbound oil tankers to Puget Sound (largely Alaskan crude) showed around 384 in 2023 (though this includes some non-Alaskan sources such as Russian oil; Alaskan volumes dominate historically).

    3. For context, Washington state refineries have historically received 80–100+ million barrels of Alaskan crude each year. At typical tanker capacities of about 500,000 to 800,000 barrels per load, which equals roughly 100–200 or more tanker trips annually, depending on vessel size and production levels. Alaska's output has fallen about 75% from its 1980s peak.

    4. In 2021 (from Pacific States/B.C. Oil Spill Task Force data), vessel transport of crude in Washington was 90.7 million barrels (much of it Alaskan via tankers), implying 100–200 tanker equivalents depending on vessel capacity.

These shipments continue today, separate from newer Canadian crude exports (e.g., via expanded Trans Mountain pipeline from Alberta to B.C. terminals, which have increased Canadian tanker traffic to Vancouver). No single "total ever" count exists in public sources, but tanker loads have occurred cumulatively since the 1970s (likely thousands overall). For current/recent context, expect 150–250 tanker loads annually transiting the B.C. coast to Washington, based on the patterns above. For precise up-to-date figures, sources like Washington State Department of

Ecology's vessel traffic reports or the Pacific States/B.C. Oil Spill Task Force annual crude transport summaries are the best references.

That translates to around 12,500 tanker trips with no issues in the congested and busy shipping lanes off Victoria and Vancouver. That is a lot of oil! Those American ships followed the west coast of Vancouver Island for over 50 years. A recently elected Canadian official using a crayon drawn map, implied that these tankers went hundreds of kilometers off the coast and purposely neglected to show them coming up the Juan De Fuca Strait beside Vancouver Island to the two refineries just across the bay from White Rock, B.C., which is approximately 150 km from the open Pacific. In recent years **tankers full of oil from Russia have sailed past Victoria** to these two American refineries! Low trust, low standards and much *lower than* Canadian standards for tankers with Alberta oil?

There remains strong opposition from the Government of British Columbia, First Nations (notably the Coastal First Nations), and *foreign funded* environmental groups, all highlighting possible risks to ecologically sensitive areas such as the Great Bear Rainforest and surrounding marine environments. In conclusion, while interest in expanding energy exports persists, the federal moratorium on offshore exploration in British Columbia's coastal waters is indefinite and shows no indication of being lifted as of early 2026. Any prospective changes would necessitate considerable policy shifts, broad stakeholder consultations, and would likely encounter both legal and public resistance. One special interest group is still building "Carbon Credit" systems and infrastructure and will not be fully imbedded till 2027. They have enough influence to stall all pipelines till they are ready to go active, this timeline may change as OPEC continues to bomb each other (who you going to call?). When they deem the time is right, they will aggressively start building oil and gas pipelines to salt water so that they can skim carbon credit tax on every barrel produced.

An Inconvenient Truth

Regarding international law, the primary United Nations provisions concerning landlocked countries (or "land-locked States or Provinces") and their neighboring states (referred to as transit or coastal neighbors) pertain to rights of access to the sea, particularly regarding freedom of transit for trade, goods, and navigation. United Nations Convention on the Law of the Sea (UNCLOS, 1982)

In less than twenty years, Canada will likely face international shipping via the Northwest Passage in the Arctic. Addressing the cleanup of major spills there will pose greater challenges than those off our B.C. coast. Ottawa will not be able to ignore or delay dealing with international traffic in these waters. The United States does not view the passage as exclusively under Canadian authority. How might Carney approach such negotiations? His elbows would certainly get quite a workout! He might hire nuclear **Chinese ice breakers** to patrol the Northwest Passage since they have *declared that they are a near arctic nation*!

Chapter Four

Calling "Bullshit"

I had to listen to Saudi Arabia stating as fact that they could produce a barrel of oil from the ground for less than ten dollars. Yes, this was true for many of their wells when they were first completed. It was also true for many of the wells drilled in the early days of Texas and Oklahoma. In fact, I personally tested a few wells that flowed to surface (Hudson's Bay Oil and Gas, just north of Drumheller) during Drillstem Tests (DST) in the late 70's, in Alberta! Even at that time I began hearing stories through my co-workers and other people who were doing work in Saudi Arabia, and they were all talking about secondary recovery methods like water floods, pump jacks, etc. That is a description of maturing oilfields. In other words, additional money spent to lift the oil to surface. *No such thing as ten dollars a barrel in the last twenty years.*

Again, Saudi Arabia can lift oil to the surface at a lower cost per barrel, but 1000 Saudi princes cannot live on dates alone! They may get the oil to surface for under twenty dollars per barrel (including secondary lifting costs for: fire flood, water flood, downhole pumps, etc.), their built in Social Benefits for their population (**social costs**) are much higher. These free services are paid directly by their production of oil and bring the fixed cost of a barrel of oil up to $50 / $60 dollars per barrel.

Saudi official statements should be treated with caution. One striking example is Jamal Khashoggi, a Saudi journalist and dissident who had lived in self-imposed exile in the United States since 2017. While there, he wrote columns for *The Washington Post* criticizing the Saudi government and Crown Prince Mohammed bin Salman. Khashoggi advocated reform and opposed authoritarian policies, foreign interventions, and crackdowns on dissent. On October 2, 2018, he entered the Saudi consulate in Istanbul to obtain divorce papers needed to marry his fiancée, Hatice Cengiz. She waited outside for hours, but he never came

out. Turkish authorities later concluded that he was killed inside the consulate by a 15-member Saudi team sent specifically for the operation.

He was known for advocating reforms in Saudi Arabia while opposing its authoritarian policies, foreign interventions, and crackdowns on dissent. *en.wikipedia.org* Cengiz waited outside for hours, but he never emerged. *nbcnews.com* Turkish authorities later concluded that he was assassinated inside the consulate by a 15-member Saudi hit squad (by this time I had figured out that they did not mean a layoff list) that had flown in specifically for the operation.

According to Istanbul's chief prosecutor, Khashoggi was strangled almost immediately upon entering, his body was dismembered and dissolved in acid to destroy evidence, in what was described as a premeditated killing. *theguardian.com* Turkish authorities said Khashoggi was killed shortly after entering the consulate. The Saudi government initially denied involvement and claimed he had left safely. But after international pressure and the emergence of Turkish intelligence evidence, including audio recordings, Saudi officials acknowledged on October 19, 2018, that he had died inside the building during what they described as a fight—a claim widely viewed as a cover-up.

However, under mounting international pressure and evidence from Turkish intelligence—including audio recordings of the murder—they admitted on October 19, 2018, that he died in a "fight" inside the building, though this narrative was widely dismissed.

A 2018 CIA assessment reportedly concluded with high confidence that XXXX had ordered the assassination, citing his control over such operations. Saudi Arabia later prosecuted 11 individuals in closed proceedings, sentencing five to death—later commuted to 20 years—and three to prison terms, while acquitting several figures close to MBS, a process widely criticized for its lack of transparency.

The killing sparked global outrage and strained Saudi Arabia’s relations with Turkey, the United States, and other countries. It prompted calls for accountability, boycotts of Saudi events, and a 2019 U.N. report by special rapporteur Agnès Callamard that described it as an extrajudicial

killing for which Saudi Arabia was responsible. Khashoggi's body was never recovered, and the case remains a symbol of the dangers faced by critics of authoritarian regimes. As of 2026, full accountability remains unresolved, and the case continues to shape discussions about press freedom and human rights in the region. I might say this sets a precedent for all authoritarian governments and new "Wanna Be's around the world.

The same government that picks a number for its proven reserves treats its own citizens in this manner? I would like to quote an infamous poet from my childhood, Mr. Harry Pearl a.k.a. (Short Harry), "Hit me hard and call me stupid." Name three people in Canada who would take anything seriously that this government stated, politicians do not count! Please note that Saudi Arabia is one of the better OPEC members and an important ally of the U.S.A., size really can have an influence. Enough said let us move on. I would like to offer the following example to lighten this portrayal of OPEC and offer a lighter side on an interesting out take for my book.

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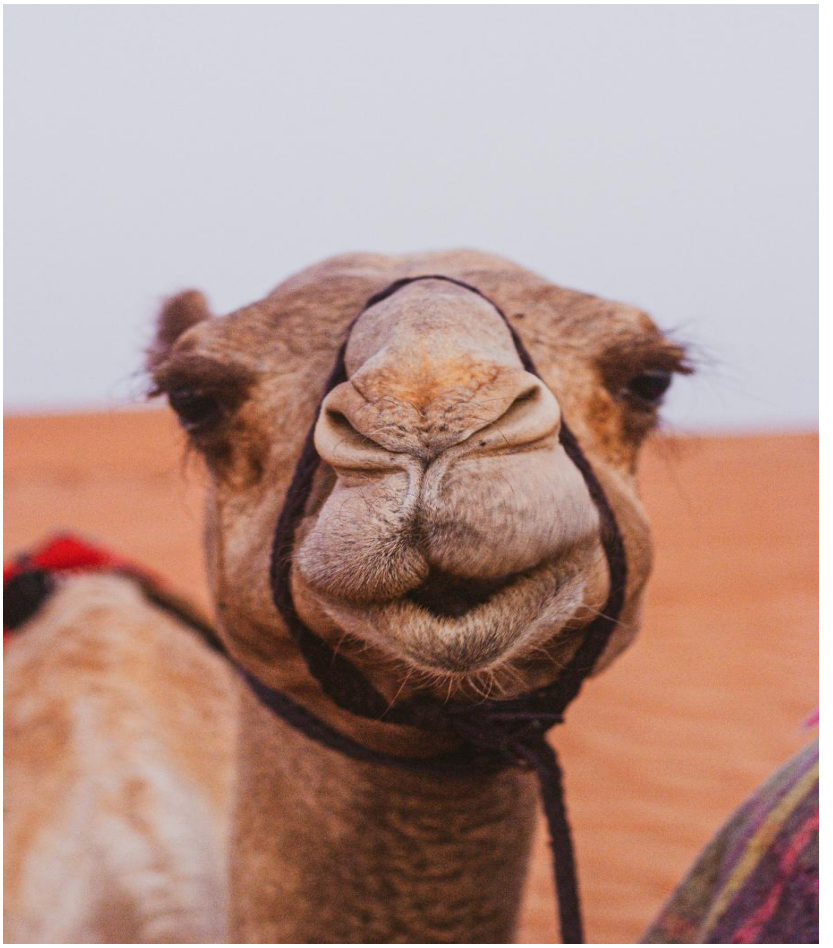
Camel Beauty Contests

(reminds me of someone?)



Those Botox lips, those eyes! But let's face it, she needs lash extensions!

Yes, the Middle East has **camel beauty contests**—and they are a serious, high-stakes cultural tradition, especially in the Gulf countries like Saudi Arabia, the United Arab Emirates (UAE), Qatar, and Oman. These events, often called mazayen al-ibl (camel beauty pageants or competitions), celebrate Bedouin heritage and the historical importance

of camels in desert life. They attract thousands of participants, huge prize pools (sometimes tens of millions of dollars), and intense competition among breeders.

Major examples

King Abdulaziz Camel Festival (Saudi Arabia): Often called the "Super Bowl" of camel beauty contests or "Miss Camel." Held annually near Riyadh, it features dozens of categories judged on traits like coat shine/color, long elegant neck, large head with pouty/pendulous lips and long dark eyelashes, and shapely hump with good posture. **Prize money has reached $66 million** or more, with tens of thousands of camels participating. It is one of the largest and most prestigious events. Judges evaluate natural beauty and breed standards (e.g., purebred Asayel or Majahim camels).

Key features include:

- Shiny, well-colored coat
- Long, wide neck
- Large head with *expressive lips and eyelashes*
- Shapely, *well-postured* hump

Controversies: **The high stakes have led to *cheating scandals***. Organizers use advanced veterinary tech to detect tampering, such as:

- Botox and fillers injected into lips, noses, or heads
- Hump "inflation" or silicone implants!
- Other enhancements

Dozens of camels have been disqualified in Saudi Arabia (e.g., 40+ in 2021, 12 in 2018) and 20 in Oman's 2026 festival. "Who would have thunk?"

Canadian Refineries

Over the years, I have observed several aspects of the discourse surrounding our oil and gas industry, particularly regarding national unity. One topic that frequently arises is the discussion about constructing refineries in Alberta to process heavy oil from the oil sands into lighter grades and products such as gasolene and diesel. This would allow the refined product to be transported to Eastern Canada, thereby reducing reliance on foreign oil imports purchased at world market prices.

There is always an economics guru (typically from a University in Ontario) who is quoted on all the national news channels that says, "Alberta is too small a market!" No truer, statement was ever spoken, and I would agree! This is twisting the question and hiding the underlying status quo. Although Alberta is too small a market for all the products: diesel, gasolene, plastics, heating oil, etc. those products could easily be shipped anywhere in North America or around the world.

Did Saudi Arabia have a population large enough to support building refineries? Between about 1986 and 2006, its population grew rapidly because of high birth rates, lower mortality, oil-driven economic growth, and immigration. Reliable mid-year estimates, mainly from the UN World Population Prospects and sources such as the World Bank, Macrotrends, and FRED, show the following broad trends:

- Around 40 years ago (mid-1980s): The population was about 8–9 million. For example:
    - 1985: 8.15 million
    - 1986: 8.63 million
    - 1987: 9.13 million
- By the mid-1990s (around 30 years ago): It had roughly doubled to 13–19 million.
    - 1992: 11.7 million (UN estimate) or 16.9–17 million (census figure)

        - 1996: 13.8–19.4 million (estimates vary slightly by source)
    - Around 20 years ago (mid-2000s): The population reached 20–25 million.
        - 2004: 19.7 million (UN/mid-year estimate) or 22.7 million (census)
        - 2005: 20.6 million
        - 2006: 21.5 million

Note some variations exist across sources: UN-aligned estimates (e.g., World Bank/Macrotrends) tend to be lower in the 1980s–1990s (e.g., 8–16 million) compared to some census-based or other figures (e.g., 13–17 million in the 1990s). This often stems from differences in counting expatriate workers and timing (mid-year vs. census date). Official censuses provide snapshots:

- 1992 census: 16.9 million total
- 2004 census: 22.7 million total

Overall, *the population roughly doubled or more over those two decades*, from under 10 million to over 20 million, reflecting one of the world's faster growth periods at the time (annual rates often 4–6% in the 1980s, slowing later).

Canada's population at that time was approximately 32 million. How does that work? Canada's population was roughly 30% bigger than Saudi and we could not justify building refineries? The world's biggest and richest market, USA, literally at our doorstep? Huh? This is just one of our *stupidest mistakes* ever made! Instead, our national *brain bank* in Ottawa chose to do nothing. Instead of refining our heavy oil in Alberta creating permanent, long term, skilled jobs in Canada (such as Montreal refineries with access to cheap Alberta oil) and a huge exporting industry of value-added products, we opted to export our oil at a discount to the USA, have them refine it and then import all those products at world prices back to

Canada via rail and trucks. Well, if that is not living downwind from the outhouse!

- Canada: 16–18 total refineries, but only a small number (mainly 4–6 in Alberta/West, plus limited others) have meaningful capability for Alberta heavy oil/bitumen. Total heavy processing is constrained; much of Alberta production is upgraded to SCO first or exported raw.
- USA: 130+ refineries with far greater volumes overall and complex coking capacities. Many dozens (concentrated in Midwest and Gulf Coast) are configured for heavy sour crudes like Alberta's (75%), processing millions of barrels per day of Canadian heavy oil. U.S. capacity dwarfs Canada's (nearly 10x in total refining).

This North American integration means Alberta heavy oil flows south via pipeline for refining, while Canada imports lighter products or crude as needed. U.S. Gulf Coast and Midwest refineries are particularly optimized for it due to historical investments.

If Alberta were to expand its refining capacity, it could potentially adhere to the B.C. tanker ban, as the regulation *specifically targets heavy oil* from Alberta while exempting lighter oils. The ban does not extend to *non-persistent oils* (this is a Greenie Meanie term), such as gasoline and lighter refined products. Alberta could also build a pipeline to Stewart, B.C. and have the pumping docks on the American side and by-pass the Alberta tanker ban entirely! OOPs! Local band has said “Please do” to a pipeline.

Let us suppose you were an oil refinery in eastern Canada, and you could get your crude oil supplies from Venezuela. You could negotiate independently for your oil supplies outside of Canadian authority, buy your oil through a *broker* offshore at best price. While the oil was in transit to your refinery you could then buy that oil at a slightly higher price effectively trimming the profit margin and avoiding most of the Canadian taxes. Sweet deal, even if caught you might get off with just a mild reprimand and a promise not to do it anymore. Why would you want your crude oil supply to come from Alberta? Why have a pipeline come east from Montreal?

What if there was a private company that had a fleet of double hulled tankers that moved oil, diesel, heating oil, and other products from Montreal refineries around the smaller coastal towns in Quebec, Maritimes, Arctic, and NFLD. These companies may not want a pipeline to go further east than Montreal. Less competition and more control over their pricing, what kind of lobby power would a Quebec tanker company have had with Justin Trudeau (pick a scandal)?

Line 9 oil pipeline to Montreal

Let us look at the Enbridge Line 9 pipeline that transports crude oil from Sarnia, Ontario, to Montreal, Quebec. This includes significant volumes originating from Alberta (Western Canadian heavy crude, such as diluted bitumen or blends from the oil sands/WCSB), which reaches Sarnia via the broader Enbridge Mainline system before continuing eastward on Line 9.

- Capacity: The pipeline has an average annual capacity of 300,000 barrels per day (bpd). *This follows a 2015 reversal and expansion project* (from the prior 240,000 bpd), approved to enable reliable delivery of Western Canadian crude (including heavy grades from Alberta) to Montreal-area refineries.
- Throughput/Flow: Specific recent daily throughput figures for Line 9 are not publicly detailed in granular monthly or real-time data from sources like the Canada Energy Regulator (CER) or Enbridge's latest reports (as of early 2026). However, Line 9 is the primary pipeline supply route for Quebec refineries (e.g., *delivering over 60% of their crude receipts in some historical periods post-reversal*). Quebec refineries process a mix, with roughly 50% or more from Alberta/Western Canada via Line 9 in recent contexts, supplemented by U.S. light crude or other imports. Montreal refineries (primarily Suncor and others) have access to this flow, and the *pipeline operates to meet regional demand*. Given the system's design and market conditions, throughput often approaches capacity

when demand is strong, but exact current volumes (e.g., for 2025-2026) fluctuate based on refinery needs, crude pricing, and apportionment on upstream Mainline segments.

In summary, up to 300,000 bpd of crude oil (much of it from Alberta via upstream connections) can reach Montreal via Line 9, with actual deliveries typically in that range or close to it, to supply Quebec refining needs. For the most precise current throughput, refer to CER pipeline profiles or Enbridge shipper reports, as flows can vary seasonally or with maintenance.

To clarify, Alberta crude oil is transported to refineries in Montreal, where it is processed and the resulting *products are distributed to meet Quebec's requirements*. The pricing of these refined products aligns with global market rates, which results in a considerable profit margin. Given the effectiveness of this arrangement, there appears to be little incentive to transport the oil further east or seek access to tidewater for Alberta since that would *eliminate* the discount for Alberta oil. Quebec and Ontario are protected somewhat from OPEC pricing swings via cheap Alberta oil. Why would this pipeline have any variance in its maximized design capacity? Why doesn't it flow straight into an oil terminal that loads any excess onto tankers for export? OMG!

The United States does not directly own Canadian oil reserves or assets. Its role is mainly through investment and share ownership in Canadian oil and gas companies. By late 2025, U.S. investors held about 59% of these firms, up from 56% in 2024, while Canadian ownership had fallen to 34%. In the oil sands, about 60% of ownership was American and about 27% Canadian. Statistics Canada data for 2023 show that foreign-controlled assets accounted for 33% of the oil and gas extraction industry, with U.S.-controlled enterprises making up about 47% of that share. This ownership is primarily corporate and shareholder control, not direct control of reserves, and profits largely flow to U.S. head offices and shareholders. There is no evidence of majority U.S. government ownership; private U.S. capital remains dominant.

The landed costs—which encompass the purchase price as well as transportation and associated fees to U.S. ports—for Venezuelan heavy crude (Merey blend) and Albertan heavy oil (Lloydminster blend) imported

into the United States over the past decade are presented below. Due to U.S. sanctions, direct imports of Venezuelan crude were significantly restricted or ceased altogether from 2017 to 2024, resulting in an absence of price data for those years. In periods where both data sets are available (specifically 2016 and 2025), *Venezuelan heavy crude has generally been priced lower than its Albertan counterpart*, a disparity attributable to variations in lower quality, sulfur content, and overall market dynamics, but we all know what runs downhill!

Year	Albertan Heavy (Lloydminster)	Venezuelan Heavy (Merey)
2016	$39.90	$36.79
2017	$49.18	N/A
2018	$65.43	N/A
2019	$62.80	N/A
2020	$37.54	N/A
2021	$64.73	N/A
2022	$89.83	N/A
2023	$80.31	N/A
2024	$82.76	N/A
2025	$75.49	$63.81

American Influence, Stewardship and Resource Management

The Americans have upwards of 60% ownership in the Canadian Oilsands. This is through share ownership and investment capital. It has worked out that the discounted dollar amount for Canadian heavy oil (primarily the Western Canadian Select or WCS benchmark blend of heavy/bitumen-based crude) sold into the United States refers to the price differential (discount) versus the U.S. light sweet benchmark West Texas Intermediate (WTI). This discount arises from quality differences (WCS is

heavier and sourer, requiring more complex refining which they have already built), transportation costs from Alberta to U.S. refining hubs (mainly Midwest and Gulf Coast), and occasional pipeline capacity constraints or market overhangs.

Typical and Long-Term Discount Range

- Historical "normal" or baseline discount: Around US$10–15 per barrel, reflecting quality adjustments and average transport costs to the U.S. Gulf Coast. Many analyses cite US $13/bbl as a *theoretical parity level* once infrastructure is sufficient. I on the other hand would recommend building more pipelines to tidewater and watch what world markets say the theoretical parity level really is! Not that I do not believe those Eastern Economics Gurus.
- Longer-term observed average:
    - From 2008–2018: Averaged US $17/bbl discount.
    - **Broader recent periods** (e.g., post-2010 or 2013–2017): Often cited around US $15–17/bbl on average, with volatility.
- Over the full thirty years (roughly mid-1990s to 2025), consistent annual data for WCS is limited before 2005–2009 (when WCS as a benchmark became more established). Pre-2000s heavy oil differentials existed but were generally narrower or less tracked in the same way, as oil sands production scaled up significantly later. The discount has widened in periods of pipeline bottlenecks (e.g., 2018 spike to US$50/bbl at peak) and narrowed with new capacity or demand shifts. Recent Annual Differentials (WTI minus WCS, in US $/bbl) Here are documented annual averages from official and industry sources:

- 2023: US$18.65/bbl discount.

- **2024: Narrowed to US$14.73/bbl (helped by the Trans Mountain Expansion pipeline providing more export options).**
- Forecasts (base case): US $11–12/bbl in 2025–2026, stabilizing near US $13/bbl longer-term as market access improves, though *volatility* from global heavy crude supply or U.S. policy (Bombing IRAN) remains possible.

Wider spikes have occurred, such as discounts of US $25–30+ per barrel during constrained years like 2012–2013 and 2018, while tight markets have occasionally narrowed the discount to below US $10 per barrel. The discount is almost always positive, meaning WCS remains cheaper than WTI, but it fluctuates monthly with supply, refinery demand, and organization. No single cumulative discount figure has existed for the past 30 years because calculating one would require detailed annual or monthly export volumes and corresponding discount data for each period.

- Annual (or monthly) production/export volumes of Canadian heavy oil to the U.S. (which grew dramatically from 1.7 million b/d total Canadian production in 1990 to over 4 million b/d by the late 2010s, with heavy/bitumen a large and growing share).
- Multiplying daily/annual volumes by the varying discount each year.

For context, one analysis estimated **US $49 billion in foregone industry revenue to Alberta** from 2010–Sep 2025 due to differentials exceeding a normalized US $13/bbl baseline (driven by capacity issues). This illustrates the scale of the problem for Canada! Size matters!

Bypassed Pay is the Way

The practice of hydraulically fracturing (fracking) horizontal wells in West Texas—primarily in the Permian Basin's shale/tight oil plays like: Wolfcamp, Spraberry, and Bone Spring—frequently leaves significant "bypassed pay" or bypassed oil zones that are not effectively produced by the initial completion. These zones often remain undrained or under-drained unless the well is refractured (refrac'd) one or more additional times.

Bypassed Oil Zones Occur in Horizontal wells in the Permian and are typically completed with multi-stage plug-and-perf fracs along long laterals (often 5,000–15,000+ ft). Fluid, sand (proppant), and chemicals are pumped to create fractures that connect the tight rock to the wellbore. However, early-to-mid 2010s designs (and even some more recent ones to a lesser degree) commonly left portions of the reservoir unstimulated or poorly stimulated for these reasons:

- Wide fracture cluster/perforation spacing — Early wells often spaced clusters too far apart (e.g., operators "spacing clusters like they were afraid of hitting the neighbors"), leaving rock between clusters unfractured.
- Sub-optimal proppant volumes, fluid volumes, or frac intensity — Older designs used lower sand loads and lighter treatments compared to today's high-intensity completions, resulting in fractures that close or fail to propagate effectively.
- Cluster efficiency issues — Industry analyses show that 30–40% (or more) of perforation clusters in initial fracs often contribute little or no production, creating bypassed pay within the same lateral.

This is not unique to West Texas but is well-documented in Permian horizontal wells, especially 2010–early 2020s vintages. Shale/tight oil recovery factors are inherently low (typically 5–15% of original oil in place), so a **lot of oil is left behind** even in "good" wells—much of it in these bypassed or under-stimulated zones.

Refracturing involves re-entering an existing horizontal well, isolating sections (often with mechanical liners, diverters, or plugs), and pumping new or re-stimulated fractures to reach virgin/untapped rock or reopen inefficient ones. It directly targets the bypassed pay that the original frac missed.

- Modern refrac techniques (e.g., mechanical isolation or diverting agents) avoid just re-treating depleted zones and instead create new fractures in untouched areas.
- Production uplifts are significant: Permian wells have shown 32% gains post-refrac, with some analyses reporting 70–100% increases in estimated ultimate recovery (EUR) in comparable legacy shale plays (though Permian has fewer candidates so far because it developed later than plays like the Eagle Ford or Bakken).
- This is cheaper and faster than drilling new wells while leveraging existing infrastructure (pads, pipelines, etc.).

Refracs are not always done "a couple of more times" (most discussions focus on one effective re-stimulation), but some wells do receive multiple refracs or re-stimulations over their life, especially as technology *improves* and economics favor squeezing more from existing laterals rather than new drilling. Without refrac (or alternatives like infill child wells nearby), those specific bypassed zones in the original lateral **often remain largely unproduced**.

Context

- Older vs. newer wells: The issue was more pronounced in early horizontal Permian wells (2010s). Today's tighter cluster spacing, higher proppant loads, reduce (but do not eliminate) bypassed pay.
- Not the only recovery method: Some bypassed oil can eventually drain slowly or be accessed via infill drilling (child wells), enhanced oil recovery (EOR), or other techniques, but refracturing the

existing wellbore is a primary, proven way to target it (economically?) from the same lateral.

- This is standard industry practice and discussion in Permian-focused publications, operator reports, and technical analyses—not a fringe claim.

In short, yes—the initial frack in many (especially legacy) horizontal wells in West Texas leaves bypassed oil zones that are typically only produced economically through additional refracturing. This is why refrac technology is an active and growing part of maximizing recovery in the Permian Basin.

Summary

This bypassed pay is important from the viewpoint that it points to ineffective and inefficient understanding of how all horizontal wells could be evaluated with a Coil Tubing remotely operated Drillstem Test Tool. Currently there is not one in existence. The technology was available 10 years ago, but the equipment has been put on the shelf of lost opportunities in the Canadian oilpatch.

I must point out that the amount of sand, chemicals and expense that is being thrown at fracking these wells three times, raises the cost of production for the oil drastically. No matter how effective it may seem, there will always be extra residual oil that is being left behind which can never be produced. This is more common in horizontal wells all over the world. West Texas must be produced with horizontal wells to make it viable, but they already have the frack equipment and personnel present, why not try fracking repeatedly? They have roads, rail, and supply lines so this is not a major hurdle to overcome.

What if your horizontal well is in a desert? Extremely remote? Would you be able to afford to frack the first time? The U.S. can do these things since they have volume discounts (size matters). This makes the argument that producing Alberta's heavy oil is much friendlier to the environment, regardless of how ugly it looks before reclamation (washing

sand). The U.S. will run out of these deep tight formations decades before Canada can even get started building its Super Resource engines!

Transportation Costs and Geography

(Pipeline Constraints & Landlocked Location)

- Alberta is **landlocked**, far from major U.S. refining hubs (Midwest and Gulf Coast). Oil moves primarily by pipeline (cheapest) or more expensive rail.

Note 1: The above statement is incorrect and assumes no access to tidewater. There is a pipeline to the Pacific Ocean that loads Alberta oil onto tankers in Vancouver. Since TMX expansion (operational May 2024), the overall WCS-WTI differential has narrowed significantly (from US $17–20/bbl pre-TMX to averages of US $11–14/bbl post-TMX), boosting realized prices for producers *by billions (who knew?)*. Vancouver loadings give access to Asian buyers, who sometimes pay relative to Brent (often higher than WTI). There is pipeline access to the Port of Montreal on the Atlantic side, but its purpose was to supply cheap dirty oil along with dirty oil equalization payments to Quebec only.

Note 2: I might suggest that another *large capacity* pipeline for Alberta Crude Oil WCS to the west coast would narrow this differential pricing even further. It could push it down to approximately $ 8.48 - 11.48/bbl range. This differential pricing will always exist unless Alberta builds more refineries to compete directly with WTI oil. One thing for sure would occur; this price differential would become less volatile.

- Baseline transport cost to the U.S. Gulf Coast is $ 7–10/bbl via pipeline; rail is significantly higher. This statement is dumb, why transport to gulf, Americans just want it for themselves so they can be the sole source buyer of Canadian oil in mid-west. They will blend, refine, and profit in their own market and export their oil for world prices $$$$$ at the Gulf Coast.

- Historically, pipeline capacity has not always kept pace with oil-sands production growth, creating bottlenecks and "takeaway" constraints. This forces producers to discount WCS further to move volume, sometimes dramatically (e.g., $40/bbl in 2018).
- Limited global market access (no direct tidewater until recently) means Canada cannot easily arbitrage to higher international prices (e.g., Brent). The *U.S. is essentially the only buyer for most barrels*, giving **U.S. refiners leverage**.

Note 3: The statement above (no direct tidewater until recently) is incorrect since the Trans Mountain Pipeline Company finished their line to Vancouver on Oct. 17, 1953. Damned thing is older than me!

Other contributing (but secondary) factors include seasonal refinery maintenance, competing global heavy crudes (e.g., Mexican Maya), inventory levels, and broader supply/demand imbalances.

How the Differential Has Evolved

The discount is not fixed—it narrows when takeaway capacity improves or production is curtailed and widens during constraints. This means the **discount is less dependent on quality and more on lack of overseas markets and Pipelines**. The 2024 Trans Mountain Expansion (TMX) added West Coast export capacity and Pacific market access, *narrowing the average WCS-WTI differential* by several dollars (e.g., from $18.65/bbl in 2023 to $14.73/bbl in 2024, with **forecasts around $11–13/bbl in coming years**).

In short, the **differential is due to unfair U.S. pricing and monopoly power** but there are differences in quality and logistics. These are the same reasons Alberta crude trades at a discount to similar-quality heavies from other countries that have better access or lower transport costs. Alberta government and industry analyses (e.g., from the AER, CAPP, and historical reports) consistently cite these exact drivers.

I must ask who has better access or lower transportation costs to the USA than Canada? Who can whine better than our Federal government to Uncle Sam? Excluding Quebec and ignoring the elbow flapping.

Alberta asking for more Pipelines to Tidewater

"Please sir, can I have some more?"

In this picture Alberta (Oliver Twist) has a bowl in hand and is asking the M**aster** if he can have more pipelines to tidewater. The master in this case would be "Uncle Sam" since he has the most to lose. The woman behind the master would represent the Canadian Federal Government and the little rascals sitting at the table would each represent the other Canadian provinces. Quebec could be the bigger boy standing and protesting lest someone else might get more!

The line has become a timeless symbol of:

- Asking for more when you are expected to be grateful for scraps.
- Challenging authority or systemic injustice.
- Humble (or cheeky) requests in general.

You will hear it used humorously today in memes, comedy sketches, or when someone jokingly asks for seconds at dinner, extra helpings, or more of anything scarce.

Chapter Five

British Columbia's Support for Alberta

You would think that Provincial neighbors would treat each other with a little more respect. In the 1970's there was a common feeling among people in Alberta that a lot of the people in B.C. were: hippies, tree huggers, wore plaid checkered shirts, and waffle stompers (hiking boots). They had migrated over the Rocky Mountains since they did not want to work and did not know how to survive cold winters. The majority migrated to Vancouver Island, the Gulf islands where they bought land, houses and settled. They raised medicinal plants, tried to live off the grid and after they died their children did very well. Land values soared on the coast, largely due to a steady flow of people from across Canada retiring to those same communities to get away from snow and ice.

There was a darker side to this prosperity and an arrogance towards other parts of Canada. British Columbia was renowned for *large-scale illegal indoor grow operations*, often in residential areas, fueling organized crime and significant exports (especially to the U.S.). Data comes from police seizures, academic studies, and economic estimates, as the industry was illicit.

- 1990s–early 2000s: Grow operations surged. Police-discovered cases rose over 220% from 1997 to 2000. Average plants per seized indoor operation increased from 149 in 1997 to 236 by 2003. Estimated annual production grew from 20,000 kg (1997) to 80,000 kg (2003) based on police-attended incidents.

- Economic estimates:

    1. Around 2000–2004: Studies (e.g., Fraser Institute) estimated up to 17,000–18,000 active grow-ops, with production potentially worth billions in exports. Exports

alone were estimated at $2 billion annually (at $5,000/kg retail value assumptions).

2. Mid-2000s–2010s: Industry size estimates grew. By 2010, conservative figures suggested at least 10,000–13,000 commercial operations, valued at $1.7–$4.2 billion annually (including domestic and export markets). Some reports placed exports at $4–8 billion per year by 2010.

- Domestic BC consumption was smaller (e.g., one 2012 study estimated $407 million annually in retail expenditure by BC residents), but the bulk was export driven to the USA.

The illegal market's scale made cannabis one of BC's largest "cash crops," rivaling sectors like softwood lumber in economic impact (though untaxed and linked to crime). Post-Legalization Era (2018–Present): Shift to Regulated Market Federal legalization in 2018 transitioned production to licensed facilities under Health Canada, with provincial retail/distribution. The legal industry grew rapidly, but the illicit market persists (often with lower prices and fewer regulations) and better-quality dope!

- Legal production and sales:

1. BC is a major producer: In 2017 (pre-full legalization), it accounted for 36.6% of Canada's cannabis production.

2. By recent years (e.g., 2025–2026 data): Legal cannabis production industry revenue in BC reached billions. IBIS World reports $2.5 billion market size in 2026, with 419 businesses and robust growth (e.g., 31.1% average annual from 2020–2025 in some segments).

3. Monthly retail sales in BC: $65.9 million (February 2026), with steady year-over-year growth (7% in some periods).

4. Broader economic contribution: Cannabis production/retail added $2.4 billion to BC's GDP in 2019 (early post-

legalization). National legal sales trends show continued expansion, with BC as a key player.

- Legal sales dominate reporting now, but illicit activity continues (e.g., estimates suggest legal capture of expenditures varies, but BC's total cannabis economy—including lingering illicit portions—remains substantial).

Summary of Trends Over 30 Years

- 1990s–2000s: Rapid growth in illegal production; estimated industry value in billions (exports, $2+ billion range).
- 2010s: Peak illegal estimates ($4+ billion); transition begins with medical cannabis expansion.
- 2020s: Legal industry formalized; production revenue $2–$2.5 billion+ annually in regulated channels, plus GDP contributions of billions. Growth slowed in some areas due to competition and regulation, but BC remains a top producer.

Exact historical figures are estimates (especially pre-2018), as the illegal nature limited official tracking. Post-2018 data from Statistics Canada, Health Canada, and industry reports provide more reliable metrics. The industry's size has remained economically significant throughout, shifting from illicit/export-focused to regulated/domestic-oriented.

I would suggest that an illegal drug trade of four billion dollars per year would attract more than a few organized crime syndicates from around the world. That was the case and this coincided with the Chinese people trying to flee Hong Kong before it was assimilated back to China (resistance really was futile). Lots of Chinese people came to Canada and they developed strong communities such as Richmond, B.C. They also bought large homes and condominiums in Vancouver and would install the youngest family member or married couple to maintain their homes. They

had businesses in Asia and would travel back to manage their affairs. They were keeping the door open in Canada so they could claim Canadian citizenship if things got bad in Hong Kong. Canada was a very safe and secure country for their families and some of their wealth. British Columbia slowly outpaced almost all other provinces for its growth which was fueled by the drug trade, laundered money and non persecution of these two enterprises. There was no “will” at important levels to stop this *massive* inflow of cash. We are talking **hundreds of billions** over the last thirty years.

This wealth was distributed to and shared with all citizens who own homes or any kind of land. Even someone who simply bought a modest lot and placed a double-wide trailer on it ended up becoming a millionaire. People bringing laundered money to British Columbia could buy a condominium, hold it for five years, and then sell it, to not only double their investment, but also further clean their cash. This created a lucrative situation. With so much illegal money circulating, one might question whether anyone was being bribed or taking kickbacks? Here is an example of what can happen after twenty years of corruption:

The controversy surrounding Edison Motors (a Merritt, B.C.-based company developing hybrid and electric heavy-duty trucks) centers on provincial Clean BC grants. In early 2024, the company's CEO, Chace Barber, publicly alleged issues with the grant process after Edison applied for (and was denied) funding under programs like the Clean BC Electric Advanced Research and Commercialization (ARC) and Go Electric Commercial Vehicle Pilots (CVP). The key allegation was that MNP—an accounting firm hired by the B.C. government to administer and evaluate these Clean BC grants—later **approached Edison Motors offering grant-writing services for a 20% "success fee"** (contingent on winning the grant). This raised serious conflict-of-interest concerns, as MNP was on both sides: deciding who gets the grants and offering paid help to applicants to improve their chances. Edison saw this as effectively a **kickback** or pay-to-play scheme, publicized it via TikTok and other channels, and brought it to government attention. This sparked:

- Widespread media coverage (CBC, CTV, Global News, etc.) describing it as an **alleged "kickback scheme" or "corruption scandal.**"
- Calls from opposition politicians (e.g., BC Conservatives' John Rustad) for RCMP investigation into corruption.
- A provincial investigation ordered by the B.C. government into the grant administration (overseen by the auditor and comptroller generals), focusing on MNP's role and potential conflicts. Nothing has happened so far.

No reports indicate that a B.C. official directly demanded a bribe. Instead, the controversy involved MNP, a third-party grant administrator, rather than public officials or politicians. Edison Motors was denied funding despite multiple applications, and the case drew criticism of the B.C. NDP government's handling of clean-tech grants. As of 2025–2026, coverage continues to focus on the same 2024 allegations, with no new claims involving bribes or loans. Edison has since relied on private investment and independent development. It has also been blocked from selling its hybrid trucks because federal rules require the engines to be re-certified for generator use rather than direct drive. As a result, the company has had to sell non-hybrid trucks to stay afloat. The scale of laundered money is so large that it can outweigh voters, showing once again how size can shape outcomes.

Public attitudes in British Columbia have undergone notable change. Once, there was widespread respect for those working in industries like pulp or wood mills, logging, mining, and fishing. Over time, however, many people, especially in the lower mainland and on Vancouver Island, where property values have risen sharply—have become more critical of these traditional labor sectors. This **environmental religious group** has often supported environmental movements that oppose activities such as logging, fishing, and mining, partly because their own livelihoods are less dependent on these industries and they have benefited from increasing property values. Let them eat their cake, let us see how landownership works for them. There is a belief among some B.C. folks

that *no human is capable of responsibly managing resources* like fisheries, oil and gas, forestry, or mining.

A major concern is that many environmentalists and residents of British Columbia view LNG as safer than Alberta oil. The natural gas destined for pipelines to the west coast and LNG plants and ports is extracted from tight shale formations in northeast B.C.; through horizontal drilling and fracking, which involves mixing chemicals with a sand-slurry and pumping at extreme pressures to smash the rock at depth. Interestingly, anti-pipeline terrorists often regard this method as cleaner than transporting oil from Alberta for shipment to Asian markets by tanker. Because the fracking operations are spread across the vast expanse of northeast B.C., protesting them can be challenging, unless there is *financial motivation with travel compensation*.

Large-scale hydroelectric projects, which typically involve constructing massive dams and reservoirs to generate power from flowing water, are often promoted as a clean, renewable energy source. However, they can have *profound and often irreversible negative environmental impacts*. These effects vary by location, project design, and ecosystem, but extensive research highlights several key issues. Below, I will outline the main negative aspects:

- Habitat Destruction and Biodiversity Loss, Dams flood vast areas to create reservoirs, submerging forests, wetlands, agricultural lands, and terrestrial habitats, leading to the permanent loss of ecosystems and species.

- This inundation can displace wildlife, fragment habitats, and contribute to local extinctions, with *freshwater species populations declining by an average of 84%* since 1970 partly due to dam development.

- Downstream, altered river flows degrade riparian zones and coastal deltas by reducing sediment delivery, causing *erosion and loss of fertile land*.

- *Globally, dams have stoppered nearly two-thirds of major river systems*, devastated biodiversity and affecting at least half a billion people's livelihoods tied to river resources.

- **Disruption of Aquatic Ecosystems and Fish Populations** Dams function as barriers, blocking migratory fish, like salmon, eels, or sturgeon from reaching spawning grounds, which can decimate populations and collapse fisheries.

- Fish passing downstream through turbines face injury or death from pressure changes, shear forces, or strikes.

- **The shift from flowing rivers to stagnant reservoirs alters habitats**, favoring lake-adapted species while harming those reliant on fast currents, and reduces overall aquatic diversity.

- Alterations in Water Quality and River Dynamics Reservoirs trap sediments, nutrients, and pollutants, leading to eutrophication (excessive algae growth), reduced dissolved oxygen, and temperature stratification.

- **Releases of cold, low-oxygen water from dam bottoms** can harm downstream organisms, while supersaturation of nitrogen in spill water causes gas-bubble disease in fish.

- These changes disrupt natural hydrological cycles, including seasonal flows, which affects wetlands, floodplains, and groundwater recharge.

- **Greenhouse Gas Emissions** Contrary to the "clean" label, reservoirs emit methane (CH_4) and carbon dioxide (CO_2) from anaerobic decomposition of flooded vegetation and soil organic matter, contributing to climate change.

- Emissions are highest in tropical regions and during the first decade after flooding, with **some reservoirs producing**

more warming per unit of energy than coal or gas plants over 20 years due to methane's potency (over 80 times that of CO_2 in the short term).

- **Globally, dam reservoirs account for a greenhouse gas footprint equivalent to Canada's emissions,** and expanding hydropower could spike methane at a time when reductions are critical.

- **Increased Human Health Risks from Toxins** Flooding promotes the conversion of inorganic mercury in soils to toxic methylmercury, which bioaccumulates in fish and enters food chains.

- This is **particularly dangerous for indigenous and local communities** relying on river fish, potentially doubling exposure levels and raising risks of cardiovascular disease and neurodevelopmental issues in children.

- **Vulnerability to Climate Change and Induced Geological Risks** Hydropower is increasingly unreliable due to climate-driven droughts and erratic precipitation, which reduce reservoir levels and power output—already seen in regions like the southwestern US, Brazil, and southern Africa.

- By 2050, most dams may face extreme drought or flood risks.

- Additionally, the weight of large reservoirs can induce earthquakes, sometimes fatally, and slightly alter Earth's rotation, axis tilt, and gravitational field James Bay, Quebec).

- While mitigation strategies like fish ladders, environmental flows, or soil removal before flooding can reduce some impacts*, many effects are inherent to large-scale projects and often outweigh benefits in sensitive areas.*

- Critics argue that alternatives like solar and wind are more sustainable and competitive, especially as hydropower's environmental costs become clearer.

Summary

These Canadian special interest groups, other Provinces, disruptive citizens, politicians, and foreign interest groups have targeted the Canadian Oil and Gas sector for decades. They have been openly hostile towards anything positive coming from the Canadian Oil and Gas industry, with no regard to the possible benefit to all people on the planet. This has been such a pervasive and destructive movement that again *emphasizes that Canadians cannot manage their own resources*. This attitude has manifested itself in other ways such as Quebec perceiving itself as the Arts and Culture center for Canada and that wind and solar projects can totally displace oil and gas for **Base Loads** on the electrical grids.

Here is another example, the Canadian federal government supports arts and culture primarily through the Canada Council for the Arts and the Department of Canadian Heritage. The Canada Council offers 6 main grant programs:

1. Explore and Create canadacouncil.ca
3. Engage and Sustain
4. Creating, Knowing and Sharing: The Arts and Cultures of First Nations, Inuit, and Métis Peoples
5. Supporting Artistic Practice
6. Arts Across Canada and Abroad

Canadian Heritage administers approximately 25 funding programs relevant to arts and culture (excluding tax credits, sports-focused initiatives, or unrelated areas like official languages). These include:

- Building Communities Through Arts and Heritage

- Canada Arts Presentation Fund
- Canada Arts Training Fund
- Canada Book Fund
- Canada Cultural Investment Fund
- Canada Cultural Spaces Fund
- Canada History Fund
- Canada Media Fund
- Canada Music Fund
- Canada Periodical Fund
- Canada Travelling Exhibitions Indemnification Program
- Canadian Conservation Institute internship programs
- Changing Narratives Fund
- Commemorate Canada
- Creative Export Canada
- Documentary Heritage Community Program
- Indigenous Languages and Cultures Program
- Listen, Hear Our Voices initiative
- Local Journalism Initiative
- Movable Cultural Property Grants
- Multiculturalism and Anti-Racism Program
- Museums Assistance Program
- National Acadian Day
- National Day for Truth and Reconciliation

This brings the total to around 30 federal grant programs for arts and culture, though the exact count can vary depending on how sub-components or related initiatives (e.g., heritage preservation or creative industries) are classified. Other federal entities like Telefilm Canada or the National Film Board contribute to cultural funding but are more specialized and not always counted as general grant programs. Regarding applicants based in Quebec: Comprehensive aggregated data across all federal programs is not publicly available in a sole source, as Canadian Heritage *does not routinely publish applicant breakdowns by province* (their reports focus more on funding decisions, service standards, and total volumes for specific programs).

However, detailed statistics are available for the Canada Council, which manages most direct arts grants. In 2024-25, Quebec-based applicants represented a sizable portion, **often 25-35% of totals in reported programs, aligning with or exceeding Quebec's 23% share of Canada's population due to its robust arts sector**. Here are key Canada Council application figures for 2024-25 from available program data (note: not all programs report full applicant stats publicly, but these cover major ones; total applications across all Council programs likely exceed 12,000 based on partial aggregates):

Program	Applications	Quebec	Quebec Share
Explore & Create	7,146	2,500	35%
Arts Across Canada - Public Outreach	751	218	29%
Arts Across Canada -	520	162	31%
Arts Across Canada -	223	65	29%
Arts Abroad	666	200	30%

For Canadian Heritage, total applications vary by program but can be substantial (e.g., Building Communities Through Arts and Heritage - Local Festivals: 1,143 applications; Canada Arts Presentation Fund: 526). **Quebec typically receives a disproportional or higher share of funding** (e.g., 25-30% in comparable cultural programs), suggesting a similar applicant distribution, though exact numbers are not broken down by province in public reports, go figure? As of the most recent Statistics Canada quarterly population estimates (released March 18, 2026, for January 1, 2026):

- Quebec's population is 9,033,887 people. This reflects a slight quarterly decline of -0.3% from the previous quarter (Q4 2025: 9,058,089).
- Canada's total population is 41,472,081 people. This marks a small annual net decline (the first since Confederation), driven largely by reductions in non-permanent residents.

Quebec represents approximately 21.8% of Canada's total population. (Calculation: 9,033,887 ÷ 41,472,081 ≈ 0.2178, or 21.8%.) This percentage has been gradually decreasing over decades (from around 28% in 1971 to under 23% in recent years), as other provinces like Alberta and British Columbia have grown faster due to migration patterns. Quebec remains Canada's second-most populous province after Ontario. Note: These are official preliminary estimates from Statistics Canada; populations fluctuate with immigration, births, deaths, and interprovincial migration. The 2021 census figure for Quebec was lower (8,501,833), with post-census growth pushing it higher before the recent dip.

Quebec accounts for 21.8% of Canada’s population, but its applications for Arts grants result in the province receiving between 25% and 30% of the total grant funding. Excellent job for Quebec, no doubt those Have-Provinces need to step up their game! Quebecers cannot live on just equalization payments alone.

Canada’s Possibilities:

Canada truly is a magnificent modern country with a strong history and many cultures. Proven reserves (also called 1P or proved reserves) refer to quantities of oil that, with reasonable certainty (typically ≥90% probability), can be commercially recovered from known reservoirs under existing economic conditions and technology.

- Venezuela: Approximately 303 billion barrels (303–304 billion in most recent 2025/2026 estimates from sources like Worldometer, **OPEC**, EIA, Statista, and others). This is primarily extra-heavy crude from the Orinoco Belt and currently ranks Venezuela #1 globally (about 17% of world totals).
- Canada: Approximately 163–170 billion barrels (e.g., 163 billion from Worldometer/**OPEC-aligned data**; up to 170–171 billion including Alberta oil sands per some EIA/government estimates). This falsely ranks Canada #4 globally (behind Venezuela, Saudi Arabia, and Iran), with 98% in Alberta's oil sands bitumen.

Venezuela's *arbitrary proven* reserves are stated to be 1.8–1.9 times larger than Canada’s. Probable reserves (often part of 2P = proved + probable, ≥50% probability of recovery) and possible reserves (3P = proved + probable + possible, lower certainty) are less standardized and rarely reported at the country level for these nations in public sources. Industry estimates (e.g., from companies or auditors) exist for specific projects, but national aggregates are not widely published like proven reserves.

- For both countries, 2P/3P figures are higher than proven but not officially tallied in the same way (e.g., OPEC/EIA focus on proven). Venezuela's Orinoco Belt and Canada's oil sands have significant probable/possible upside, but **economic viability** (heavy oil upgrading costs, prices) limits classification beyond probable to proven reserves, **except when the dollar cost per barrel goes up significantly**.

Potential reserves (broader term, often including contingent resources, undiscovered technically recoverable, or total original oil in place minus produced) are much larger but not proven/probable:

- Venezuela: Technically recoverable resources in the Orinoco Belt alone estimated at 513–652 billion barrels (USGS 2009). Proven is only a fraction (303 billion); much remains ***contingent on investment, technology***, and sanctions relief. No one will invest in development due to unstable political environment, even if the United States invaded and took over the country, they would have to maintain 20,000 troops there almost indefinitely. Realistic economically recoverable under current/improved conditions is much lower (e.g., some analysts like Rystad estimate **60 billion** as viable today due to infrastructure issues). Let us just say the "Proven" reserves of 300 Bbbls is far fetched at the present time.
- Canada: **Alberta oil sands have 1,700 –1,800+ billion barrels original in place (OOIP), with proven 159–167 billion** (AER/Natural Resources Canada). Contingent/technically recoverable resources add hundreds of billions more (e.g., estimates of 500–900+ billion *technically recoverable* in some analyses, though economic recovery is lower due to extraction costs). At $200 per barrel the extraction costs become infinitely more manageable, and the Profit margin goes up exponentially as does the total Proven Reserves!

In summary, the *arbitrary number* for proven reserves stated by their Dictator for Venezuela is greater, but both countries' potential (total resources) is enormous dominated by heavy/extra-heavy oil requiring significant processing/investment. Venezuela's production remains low (1 million bpd) despite reserves due to political/infrastructure challenges, while Canada's is higher and more stable (5–6 million bpd total oil). Data is from 2025/2026 sources (e.g., Worldometer, EIA, OPEC, AER), with minimal recent changes in proven figures.

IMPORTANT NOTE

In 2023 Venezuela declared that they considered their *proven reserves* to be 300 Bbbl of heavy oil. This represents roughly 46% of their

Technically Recoverable, (heavier and dirtier oil than Albertas) reserve potential. No indication was given of *why this announcement was made* or who personally did the calculation or methodology used. Somewhat questionable since all foreign oil companies had been expelled from Venezuela decades prior. What experts would remain and who issued their credentials or reviewed their work?

Canada's Bigger Barrel at 500 Bbbls

In contrast, Canada has not released updated figures on its proven reserves since 2003, marking more than two decades without an announcement (Alberta recently updated their reserves by 8%). Annual decreases have been observed since 2003. Canadian innovation has enabled the economic extraction of oil sands, *providing a model for other nations*. By using the definitions and applying the technically recoverable estimate of 900 billion barrels and using a methodology like Venezuela's—applying a 46% re-evaluation of Potential reserves to Proven Reserves would update—an additional 400 billion barrels of *proven reserves* can be added. Adding this to our current proven reserves number of 163 billion barrels would give us a total **Proven Reserves of 563 billion barrels of oil for Canada** by my calculations. That is 263 Bbbls bigger than Venezuela! Or roughly 85% larger than Venezuela! I may be the only one in Canada at present, who will fight for our *true position as number one in the world for Proven Oil Reserves*, hopefully a few others will join me if I ask politely.

Summary for Canada's Bigger Barrel

Canada faces significant challenges in the management of its critical infrastructure and natural resources. Addressing these obstacles through a strategic approach to resource development could resolve many of the nation's current issues. The first thing is to step up to the plate, *accept our responsibility* and tell the world that we are **number one in Proven Reserves with more than 500Bbbl.**

Chapter Six:

Lost Opportunity

What Stops Canada from Declaring We Have the Biggest Proven Oil Reserves?

Canada currently faces limitations in pipeline infrastructure leading to tidewater, with only two existing pipeline systems capable of transporting Alberta heavy oil, both of which are operating at or near full capacity (contrary to B.C. Premier & CBC). This presents a significant opportunity to increase our oil exports globally and potentially assume a more prominent role in the international market, traditionally dominated by OPEC. To influence global oil prices effectively, Canada must first tell everyone we have the "Bigger Barrel" and establish **surplus pipeline capacity**. This would entail several pipelines to be built immediately; here are some potential projects:

1. A large capacity or even twin pipeline from Alberta to Northwest B.C. coast. (Asia markets) Doctor doom (Premier) of British Columbia is hyperventilating already!

2. A pipeline from Alberta through to a merge point with the Alaskan pipeline which operates at 50% of its initial capacity. No port facilities required. (USA and Asia markets) Trump would have to be engaged (elbows up).

3. Negotiate successfully with the USA so they finish northern leg of Keystone pipeline to Canada. (USA refineries, competing with Venezuela heavy oil) Trump again, Carney's elbows would be overworked.

4. A large capacity pipeline from Alberta to the port of Churchill, Manitoba. (Europe and eastern seaboard of North America) Let those Eastern Bums and Scums (Canadians) freeze in the dark! Maybe in the near future with the help of Global Warming.

5. An oil terminal located on west end of Lake Superior that would load St. Lawernce sized tankers to supply eastern Canada and east coast of the United States. Salute Quebec while sailing down the St. Lawerence seaway!

6. A large capacity pipeline across Canada to the east coast. (Canadian independence from foreign oil and shipping our oil to world markets) No doubt it would benefit the Maritimes with base load stability for their energy requirements for another 100 years! Displace Dirty Dictator oil from Russia in Europe as well.

7. A large capacity pipeline from Alberta to Stewart, BC with oil facilities on Canadian side and tanker loading taking place on American side. By-pass all Tanker %$#^& bans on Canadian side and ship oil down the channel on USA side. (USA and Asia markets) Trump issues.

8. Line 9 pipeline to Montreal. Increase flowrate to maximum capacity and build tank farm to store extra oil and load onto tankers for Europe.

9. Recently there was a proposal for an Alberta oil (crude/bitumen) pipeline routed through the United States to access the Pacific/west coast at a location south of British Columbia—meaning through U.S. states like Montana, Idaho, and into Washington or Oregon—for export (likely to Asia) or access to U.S. West Coast markets/ports.

This idea is tied to comments Alberta Premier Danielle Smith made in late 2025. She said she would consider a U.S. route to the Pacific if a preferred northern B.C. pipeline were blocked by regulatory, political, or opposition barriers in Canada, including resistance from B.C., the federal government, or Indigenous groups. In a December 2025 year-end interview, she said her first choice remained a new pipeline

through northern British Columbia, but she was open to a cross-border route to the U.S. Pacific Northwest if necessary. She argued that any West Coast outlet would free access to Asian markets and suggested that existing rights-of-way could help.

Broader U.S. interest in Canadian oil under President Trump (e.g., discussions around reviving Keystone XL elements or energy ties amid tariff/trade talks), but Keystone XL alternatives focus more on Gulf Coast or Midwest routes, not Pacific. Some commentary (e.g., opinion pieces like Lorne Gunter's) speculates that BC opposition could push a U.S. route through Washington state, but this is hypothetical.

The primary Canadian expressing approval/support for exploring this U.S. route option is Danielle Smith (Alberta Premier). This U.S. route idea seems positioned as leverage or a contingency in 2025-2026 talks, amid Canada's push for a domestic BC pipeline (backed by an MOU with PM Mark Carney declaring it nationally interesting), rather than an active, approved project. No construction or formal approvals for such a U.S.-routed pipeline are reported.

Selecting any three or more of these eight potential projects would provide Canada with sufficient spare capacity to act as the **world's swing oil supplier**. This shift would position Canada ahead of the United States and Saudi Arabia in terms of influence over global oil supply. As a result, Canada could play a vital role in stabilizing prices and shielding all citizens of the world from volatility in international markets. Currently, this kind of market influence is particularly relevant, given that approximately twenty percent of global oil supply was effectively offline due to the recent closure of the Hormuz Strait, which connects the Persian Gulf with the Gulf of Oman.

This approach would allow Canada to capitalize on its increased capacity, enhancing its position on the global stage and strengthening international relationships. Economically, it could generate hundreds of billions of dollars for the Canadian economy, resulting in a substantial

surplus for the Alberta government and providing significant growth for the Heritage Savings Trust Fund—which currently stands at $30 billion CAD. This could potentially realign the fund's trajectory alongside Norway's Sovereign Fund, which exceeds $2 trillion USD (fun fact, *Norway's population is about the same as Alberta!*). Additionally, the resulting cash inflow may alleviate the need for further fiscal measures, such as the **introduction of a home equity tax** to offset the higher rate of inflation.

In the next decade who are the oil dependent countries going to call? If they want a stable supply of oil, no state terrorism sponsorship, most responsible oil production with enlightened environmental sensitivity, no special learning centers for minorities, somewhat respectful of all world cultures and very polite people *there is only Canada*!

I know the next question is who would pay for all those pipelines. Two countries that approached Canada—specifically Prime Minister Justin Trudeau—about buying more Canadian energy were Germany and Japan. Around 2022, as Europe moved to reduce reliance on Russian energy after the invasion of Ukraine, both sought Canadian LNG supplies. Trudeau's government responded that there was no strong business case for major new East Coast LNG export infrastructure, citing excessive costs and environmental priorities. Critics, especially in conservative and Alberta-based circles, called this a missed chance to diversify exports beyond the United States. Other countries, including Poland, South Korea, Greece, Ukraine, and Latvia, were also mentioned as potential LNG buyers, but Germany and Japan appear most often in this account. Direct requests for more oil, rather than LNG, were less prominently described, but the broader discussion was often framed as one of oil and gas or energy security. More recently, events such as the 2026 conflict involving Iran and U.S. trade tensions have revived interest in Canadian oil exports.

The period from 2015 to 2025 (covering the bulk of Justin Trudeau's tenure as Prime Minister until early 2025) saw relatively few major new oil and gas pipeline projects applied for at the federal level in Canada, particularly for large-scale interprovincial or international crude oil export pipelines. This reflects a combination of market conditions (e.g., low oil

prices post-2014, pipeline constraints), regulatory changes under the Liberal government (including Bill C-69 in 2019, which reformed assessments), environmental/climate priorities, and investor caution. Key major pipeline projects that involved applications or significant regulatory processes during this era include:

- Trans Mountain Expansion (TMEP): Application originally filed in 2013 (pre-2015), but the review and approvals spanned 2015–2019 under the National Energy Board (later CER) and federal government. Approved in 2019 after court challenges; government purchased it in 2018. Capacity addition: 590,000–890,000 bpd (tripling original). Cost: Ballooned to $34 billion CAD (from initial $5–7 billion estimates). Way to go Government project management at its best!

- Other notable mentions: Smaller expansions (e.g., Enbridge Mainline debottlenecking, Line 3 Replacement completed in 2019) were pursued, but few entirely new large greenfield oil pipelines were applied for after 2015–2017.

Major proposed pipelines that did not advance (often withdrawn or cancelled due to regulatory/economic hurdles) include:

1. Energy East (TC Energy, application filed 2014): 1.1 million bpd from Alberta/Saskatchewan to New Brunswick. Withdrawn in 2017 amid regulatory uncertainty, **Quebec opposition**, and costs.

2. Northern Gateway (Enbridge): *Approved in 2014 but effectively cancelled in 2016* via a tanker moratorium on BC's north coast.

3. Keystone XL (TC Energy): US permit issues led to cancellation in 2021 (Canadian portion approved earlier but tied to cross-border).

No comprehensive public tally exists for the exact number of all oil and gas pipeline applications (including smaller provincial or intra-provincial ones) from 2015–2025, as the Canada Energy Regulator (CER, formerly NEB) regulates only interprovincial/international ones, and provincial regulators (e.g., Alberta Energy Regulator) handle others. CER data focuses more on throughput/capacity than a running count of new

applications. Broader oil sands/mining/upgrading projects saw approvals for expansions (e.g., some in-situ SAGD), but greenfield mining was limited (e.g., Teck Frontier applied for, but it was withdrawn in 2020 at $20.6 billion). For dollar amounts and scale:

- Approved/constructed major projects (e.g., TMEP) represent tens of billions in investment, but new applications were sparse.
- Cancelled/shelved energy projects (including pipelines, LNG, oil sands mines) from 2015 onward are estimated at **$150–$670 billion CAD in lost investment opportunity** across sources (e.g., $150 billion cited in 2020 reports for major ones like Frontier, Energy East, Northern Gateway; higher cumulative estimates include smaller/related projects).
- Oil sands capital expenditures (not just pipelines) **peaked pre-2015 ($34 billion in 2014) and declined sharply post-2015 (e.g., $7–12 billion annually in recent years), with focus shifting to *optimizations* rather than new large projects.**

Overall, the *era featured more cancellations/rejections/stalls* than a surge in new applications for massive pipelines, amid debates over market access, climate policy, and economic viability (no business case). Recent 2025 discussions (post-Trudeau) have revived interest in new pipelines.

Land-locked States

The primary **United Nations rules governing landlocked nations** (also called land-locked States) and their neighbors (referred to as transit States or coastal/transit neighbors) focus on the right of access to and from the sea, particularly through freedom of transit for trade, goods, and navigation. These are codified mainly in two key instruments: United Nations Convention on the **Law of the Sea (UNCLOS, 1982**) This is the most comprehensive modern treaty (widely ratified and considered reflective of customary international law in many aspects). Part X specifically addresses the "Right of Access of Land-locked States to and from the Sea and Freedom of Transit."

Key provisions (from Articles 124–125):

- Definition:
    1. A "land-locked State" is one with no seacoast such as the Province of Alberta.
    2. A "transit State" is any State (coastal or not) between a land-locked State and the sea, through which transit traffic passes. This would be British Columbia but could include Saskatchewan, Manitoba, and the U.S.A.
- Right of access — Land-locked States have the right of access to and from the sea to exercise rights under UNCLOS, including freedom of the high seas and the common heritage of mankind.
- Land-locked States have the right to transit goods through transit States' territories (road, rail, waterways, pipelines).
- Implementation — The terms and modalities (practical arrangements like routes, fees, customs, security) must be agreed upon through bilateral, subregional, or regional agreements between the land-locked State and the transit State(s) concerned.
- Balance of interests — Transit States retain full sovereignty over their territory and can take measures to protect their legitimate interests (e.g., security, environment, customs enforcement), if these do not infringe on the access rights in a way that denies them unreasonably.
- No customs duties — Traffic in transit is generally exempt from customs duties or taxes (except for specific charges for services rendered).
- Additional rights — Ships flying the flag of land-locked States get equal treatment in ports, innocent passage through territorial seas, and navigation freedoms in exclusive economic zones/high seas.

UNCLOS does not grant an absolute, unconditional right of transit; it requires negotiated agreements, recognizing sovereignty of transit neighbors. Convention on Transit Trade of Land-locked States (1965) Adopted earlier (entered into force 1967), this treaty focuses specifically on transit trade (goods movement). It has fewer parties but complements UNCLOS. Key elements:

- Recognizes **free access to the sea** as essential for international trade and economic development.
- Transit States must grant freedom of transit for traffic (goods, baggage, means of transport) on a reciprocal, non-discriminatory basis.
- No discrimination based on origin/destination of goods.
- Transit States can charge reasonable fees for services but not customs duties on goods in transit.
- Land-locked States bear responsibility for costs related to supervision/protection of transit.

  This convention laid groundwork for UNCLOS provisions. Additional Context
- These rules aim to mitigate geographic disadvantages for the ~44 landlocked countries (e.g., Bolivia, Nepal, Afghanistan, Paraguay, many in Africa like Chad or Ethiopia).
- In practice, implementation depends on bilateral/multilateral agreements (e.g., Nepal-India treaties, Bolivia's access issues with Chile/Peru).
- Disputes can be resolved through mechanisms like those in UNCLOS (arbitration, International Court of Justice) or negotiation.
- Broader UN efforts (e.g., via the Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States) support these nations.

For the full text, see UNCLOS Part X (available on the UN website) or the 1965 Convention.

If the oil and gas industry had a *strong advocate*, they could use this United Nations principle to increase global pressure to lift the restrictions that special interest groups and certain individuals have placed on Alberta's resource development and sovereignty. Over the past twenty years, *every Alberta government has failed to resolve these problems*—perhaps due to a lack of vision, insufficient knowledge, political unwillingness, or an absence of long-term planning for their constituents.

Tanker Ban

What else might be holding Canada back? The so-called Alberta tanker ban on British Columbia's coast refers to the Heavy Oil Tanker Moratorium Act (commonly known as Bill C-48), a federal Canadian law enacted in June 2019 by the Justin Trudeau government. It establishes a legal moratorium (temporary but indefinite suspension) on large oil tanker traffic in a specific area of BC's northern coast to protect *environmentally sensitive waters from the risk of catastrophic oil spills* from Alaskan oil being shipped down south past Vancouver.

That last statement about those waters being environmentally sensitive rubs me the wrong way. The west coast is no more environmentally sensitive then any other coastline in Canada. I would argue that the Arctic Ocean coastline is more sensitive. How about the Gulf of St. Lawrence or the Labrador? These blind statements reflect badly on all Canadians. It *says we are not responsible or capable of managing our own land, seas, and oceans*. I reject this premise since I have seen what my fellow Canadians can build and accomplish when they are asked and called upon. Others around the globe have witnessed our capabilities, and I am confident that our communities are now more than ever exceptionally equipped to steward our resources effectively.

What the Act Prohibits:

- It bans oil tankers carrying more than 12,500 metric tons of crude oil or persistent oils (e.g., *bitumen, synthetic crude, partly upgraded bitumen, or heavy Bunker C fuel oil*) as cargo from:
    - Stopping (mooring or anchoring),
    - Loading oil, or
    - Unloading oil at any ports or marine installations in the designated moratorium area.
- Smaller shipments (under 12,500 metric tons) are allowed to support local communities' needs for heating oil, diesel, and other essential petroleum products.
- The ban does not apply to non-persistent oils, except anything from Alberta (e.g., gasoline, lighter refined products) or to vessels in transit without stopping/loading/unloading.

Geographic Area Covered moratorium zone stretches along BC's north coast from:

- The northern tip of Vancouver Island (roughly going east to the mainland point across from it) in the south.
- Up to the Canada-Alaska border in the north.
- It includes key waters like Dixon Entrance, Hecate Strait, Queen Charlotte Sound, and Haida Gwaii — often referred to collectively as parts of the Great Bear Sea or the marine areas around the Great Bear Rainforest.

This region is remote, ecologically rich (home to salmon runs, marine mammals, shellfish, and Indigenous communities reliant on fishing/tourism, **no different than any other coastline in Canada**), and has challenging navigation conditions (strong currents, fog, rocky shores), making spill cleanup difficult but possible to navigate**. Not nearly as bad as the Canadian Arctic.**

History and Background

- A de facto (informal/policy-based) moratorium on large oil tankers in these waters dates to 1972, when the federal government first imposed restrictions amid concerns over potential tanker traffic (originally aimed at preventing risks from Alaskan oil exports).
- It was never fully legislated until Bill C-48 in 2019 under the Justin Trudeau (Pierre Trudeau's son) government, which formalized it into law after significant debate, Senate scrutiny, and opposition from Alberta, the oil industry, and some Conservatives (who called it a barrier to energy exports).
- The law was a response to advocacy from **environmental groups**, Coastal First Nations (non-elected NGO), BC residents, and others worried about spill risks.

Current Status (as of early 2026) The Act remains in force and has not been repealed.

However:

- In late 2025, a memorandum of understanding (MOU) between the federal government (under Prime Minister Mark Carney) and Alberta (Premier Danielle Smith) included language about *potentially enabling bitumen exports* via a new pipeline to a BC deep-water port, which "if necessary" could involve "appropriate adjustment" to the Oil Tanker Moratorium Act.
- This has sparked controversy: BC Premier David Eby, Coastal First Nations (who strongly oppose anything, a non-profit US environmental group), and many coastal communities are pushing back hard, citing risks to ecosystems, fisheries, and reconciliation commitments.

- No concrete changes have occurred yet — any amendment would require parliamentary action, consultations (including with Indigenous groups), and likely face legal/political challenges.
- The Conservative Party has historically called for repeal, but the law stands as a key protection for the north coast of B.C.

In essence, the "**tanker ban**" makes large-scale crude oil exports from a northern BC port impractical (even if a pipeline were built), as tankers could not load/unload there without violating the law. It is distinct from the separate federal moratorium on offshore oil/gas exploration in BC waters (which we have discussed before), though both reflect long-standing environmental priorities for the Pacific coast. However*, there is a work-around.* A pipeline could be built to Stewart which is a district municipality at the head of the Portland Canal in northwestern British Columbia, Canada, near the Alaskan panhandle. The Oil facility could be built on the Canadian side with loading facilities on the American side of the channel.

The Alberta Bullet Train

I have been a proponent of the **Alberta Bullet Train** for over twenty years. When it comes to demonstrating a positive opportunity to foster national unity and strengthen the connection between Albertans and the rest of Canada, few major initiatives are as compelling as the development of a high-speed corridor linking Edmonton and Calgary. This could have been an economic powerhouse to highlight the transfer of technology and create a whole new manufacturing industry for Canada, instead it is a show case of lost opportunity!

So many people have said, “Why bother”, I want money for something else in Alberta. Problem is that all the alternatives really *did not pull money back from the rest of Canada*. Think about the money sent east for equalization payments. Every other province has tailored their budgets to show deficits so that they get more of the equalization payments or

avoid paying. All federal programs for Arts, Culture, Education, etc. are taken advantage of with more applications and grants being given to bigger Provinces.

The federal government has put forth a high-speed rail corridor between Toronto, Montreal, and Quebec City as some sort of nation building project. Prime Minister Mark Carney has prioritized several **Federal Nation-Building projects through the Major Projects Office (MPO)**, established to fast-track approvals for *initiatives deemed in the national interest*. These focus on transforming Canada's economy toward greater self-sufficiency, trade diversification (reducing U.S. reliance), energy superpower status (clean and conventional), critical minerals leadership, and new economic corridors. The projects are announced in tranches:

First tranche (announced September 2025, over $60 billion in investments):

- **LNG Canada Phase 2** (Kitimat, British Columbia): Doubling liquefied natural gas production capacity to make it one of the world's largest facilities, supporting energy exports and diversification. This phase was already *approved prior to Carney*. Why was it delayed? What new approval process was required? What new economic processing requirements were assessed?
- **Upgrades/expansion to the Port of Montreal** (Quebec): Enhancing trade infrastructure. What about upgrading the Port of Halifax? Twining the rail line from Halifax to Quebec?
- Investments in Ontario's nuclear energy, including small modular reactors (e.g., Darlington New Nuclear Project). Is this a Westinghouse connection?
- Other elements mentioned in related coverage include an offshore wind energy project in Atlantic Canada, Pathways Plus **carbon capture and storage** (Alberta), an Arctic economic and security corridor, upgrading the Port of Churchill (Manitoba), and a

proposed high-speed rail between Toronto and Quebec City for a mind blowing ninety billion dollars!

Second tranche (announced November 2025):

- Critical mineral mining projects, such as the Crawford Nickel project (Ontario), Sisson Mine (tungsten, New Brunswick), and others in Quebec and elsewhere.
- **Ksi Lisims LNG** (floating facility, British Columbia northwest coast).
- North Coast transmission line (British Columbia): Supporting energy and mining.
- **Hydro projects tied to critical mineral mines** (e.g., in Ontario, Quebec, New Brunswick).
- Additional mines and energy-related developments for critical minerals leadership.

These align with broader strategies:

- **Realizing Canada's potential** as an Energy Superpower (clean energy, nuclear, conventional like LNG). *No mention of Alberta Oil!*
- Creating new trade and economic corridors to diversify away from U.S. dependency.
- Building leadership in critical minerals for independence, defense, and global supply chains.
- Infrastructure like ports, transmission lines, and **mines to unlock resources** and access new markets.

The MPO streamlines regulatory processes (e.g., "one project, one review") to accelerate these, partnering with provinces, territories, Indigenous Peoples, and private investors. As of late 2025 announcements, these represent billions in investments, job creation, and economic resilience amid global shifts (e.g., U.S. trade pressures). Updates may

continue, as more tranches are expected. For the latest official details, check sources like pm.gc.ca or Major Projects Office pages.

High Speed Rail for Alberta vs Ontario

The High-Speed Rail proposed for Ontario to Quebec City will cost ten times more than the High-Speed Rail project from Calgary to Edmonton. The main reason it **will cost 80 billion dollars more** is due to the destruction of residential homes, numerous roadways that will have to be lifted and have over-passes constructed. This does not mention the destruction of hundreds of family farms. This will take thousands of acres of productive farmland out of production. It will have a greater impact on those small businesses since it will typically take a larger percentage of the smaller farm's total acreage.

In comparison to the Alberta project, which will have fewer overpasses, bigger farms, and ranches – less impact on those businesses and a much easier construction timeline. The land is flat and has very few trees. It is quite simple since you could almost take a compass heading north from Calgary and it would match the most optimum route. What better way to *create "good will" between the separatists in Alberta and the rest of Canada*? It would show all Albertans that the Federal government listens to them and is actively working to improve their fortunes. Ha! Ha!

Quick Facts

- 20,000 cars/trucks a day travel between Calgary and Edmonton.
- A single line of rail has the equivalent capacity of six lanes of highway. (Florida Dept. of Transport)
- Proposed $65.00 For a One-Way Ticket
- Estimated Cost of $8.2 Billion and Five Years to build
- 3 Stops in Calgary, 1 in Red Deer, 2 in Edmonton
- Province Already has purchased land for transit stops
- 75 minutes total commuting time
- 300 Kilometers per hour
- Hourly Departures
- 300-400 People per train
    - Depends on car layouts
    - Could have special car layouts for disabled/wheelchairs or stretches etc.
- Could have snack bars, Internet connections, or TV screens/monitors.

The following letter was in response to a request from a Grade 6 Class from a middle school in Calgary. This is a copy of the response I gave to their questions.

February 4, 2008
Grade 6 Class
Calgary

Re: Alberta Bullet Train Project

Dear Claire:

I am very happy to try and answer all your questions about the proposed Alberta Bullet Train.

1. *Will it be built?*

Yes, I believe it will be built. It is a question of time before the public support is great enough to enable our governments to proceed.

2. *What is the infrastructure?*

The infrastructure will be the stations, platforms, right of ways, rail bed, ties, rails, switches, overhead electric supply and related equipment, transformers, etc. Not to mention the actual electric trains themselves and other rolling stock required for maintenance.

3. *Who will pay the 7-9 billion dollars?*

This is the "Biggest" question. It will likely be a partnership between the Provincial Government of Alberta and the following entities: Federal Government of Canada, Cities of Calgary, Edmonton and Red Deer, private enterprises (potential suppliers of the trains) and Engineering firms.

This issue is complex and will need collaboration among many participants who will share responsibilities to develop an effective solution. Leadership from the Alberta Government is essential, as they will set transportation policy for Alberta for the next century or longer. In its first phase, the system will connect over 5 million Albertans, allowing residents to use public transport from their homes to any location on the network. This will provide access to 70% of Alberta's population, a figure expected to rise as more people move to the province's three main cities.

Funding could come in part as a low interest loan from the Alberta Heritage Income Trust. This would make sense as this fund is set up to help later generations of Albertan's once our oil has run out. No doubt having a Provincial Rail system will enhance all our lives over the next 100 years. The Federal Government could support it. Bring some of those "Equalization" payments back to Alberta.

4. *Who will pay to run it?*

The people who travel on the train will pay fees much like the C-Train here in Calgary. However, initially we may not have enough riders to cover the day-to-day costs of running the trains. We want the ticket prices low enough to encourage people to use the system and leave their

cars, trucks at home. This means the Alberta Government will have to subsidize the actual cost for each rider during the first 5 to 10 years, until the population of Alberta grows enough so that the daily ridership increases to the point where the users pay for all daily operations.

5. *How long will it take to build?*

It will take five years to build the first phase of the system from Calgary to Red Deer to Edmonton. It is important to note that this system would then be available to Albertans well into the next century. The second phase will likely be from Edmonton to Fort McMurray.

6. *Where will the rail be?*

The rail track for the first phase will start in Calgary next to the CP tracks between 9th and 10th avenues downtown (3 stations) and follow on the west side of the number two highway north to Red Deer. The rail will pass to the west of Red Deer close to the by-pass route for the number two highway (1 station). It will continue north on the west side of the number two highway to Edmonton (two stations).

7. *Where do you get workers to build and maintain it?*

Most of the workers will come from Alberta. There will be specialized requirements during the design phase, and we will look for expertise and technology transfers from around the world. The maintenance people will come from Alberta since we have trained professionals right here in Calgary for Electric Trains.

8. *Do you support it?*

Yes, I am a strong supporter of the Alberta Bullet Train system. I favor the ultra high-speed system (330 km/h). It is an electric train with overhead wires for the electric power, much the same as our C-Train.

9. *How many cars will there be?*

The ICE 3 is a multiple unit train which means the traction equipment is distributed over the full length of the train. The extensive under floor

electrical equipment allows more space available for passengers. A lounge in each of the two end cars gives passengers a clear view of track ahead and from behind the end car as well. The train concept is modular and permits the formation of 5 to 7 car units (up to 416 seated passengers). Up to 3 of these units can then be coupled up to each other for increased capacity.

Naming the Trains

Looking ahead, we would probably need four trains initially. I think it would be fun to name the Alberta Bullet Trains, so here are some names that might be appropriate:

- Prairie Schooner,
- Wild Rose Express,
- Blue Sky Bullet,
- Sod Buster,
- Western Express,
- Alberta Arrow,
- Pronghorn Express,
- Alberta Advantage.

Looking at the oil industry for names might give us Roughneck Express or if some day the line was to be expanded to Fort McMurray, we might want to add the 'Fort Mac Express' or 'Newfie Bullet'.

Inability to assist Europe and curb Putin's Ambitions

To fully offset Europe's pre-2022 dependence on Russian natural gas (150–155 billion cubic metres (bcm) per year, or about 40–45% of EU gas imports), Canada would need to build an LNG export industry roughly

5–8 times larger than its current/planned scale, while massively ramping up domestic gas production and solving major infrastructure, regulatory, and market hurdles. This is theoretically possible over 10–20+ years with aggressive policy and investment, but it was never realistic as a quick fix for the 2022 energy crisis—and even today it would be extremely challenging and expensive.

The scale of the gap

- Russia supplied 150–155 bcm/year to the EU in 2021 via pipelines (the real source of Putin's leverage).
- Canada currently produces 185–190 bcm/year of natural gas (record 18+ Bcf/d in 2023–2025), but almost all of it stays in North America (domestic use + pipeline exports to the U.S.). LNG exports to non-U.S. markets (i.e., Europe or Asia by tanker) are still tiny.
- Converting to LNG: 1 million tonnes per annum (mtpa) of LNG capacity ≈ 1.38 bcm of natural gas. To deliver 150 bcm/year to Europe, Canada would need 110 mtpa of dedicated LNG export capacity—plus extra production to cover domestic needs, pipeline losses, and liquefaction shrinkage.

  What Canada would have to do (step by step).

1. Explode natural gas production
   Current output (190 bcm/year) is not enough. Canada would need to roughly double production (to 350–400 bcm/year) to export 150 bcm as LNG while meeting internal demand. This means:
   - Accelerated drilling in the Montney, Duvernay, and other basins (Alberta/BC).
   - Billions more in upstream investment every year.
   - New or expanded gathering pipelines across Western Canada.

2. Build a massive LNG export industry on the coast
   Canada's current situation (as of 2025–2026):

    - LNG Canada (Kitimat, BC): Phase 1 operational (14 mtpa / 19 bcm/year). Phase 2 (another 14 mtpa) advancing but not yet final investment decision (FID).
    - Under construction: Woodfibre LNG (2.1 mtpa) and Cedar LNG (3.3 mtpa).
    - Total operational/planned by 2028–2030: ~19–50 mtpa (26–70 bcm/year) if everything gets built.
    - Government ambition: up to 100 mtpa long-term (138 bcm/year).

3. To hit 110+ mtpa for Europe, Canada would need:

    - Dozens more liquefaction trains/facilities (far beyond the 7–8 projects currently permitted or proposed).
    - New terminals on the East Coast or Arctic (West Coast BC projects are optimized for Asia; shipping LNG from Kitimat to Europe takes 30–40+ days via Panama and is uneconomic without massive subsidies or swaps). **One floated idea: a new pipeline to an Arctic port like Churchill, Manitoba** (5–7 years minimum).

4. Build enormous new pipeline infrastructure

    - Expand Coastal GasLink (already serving LNG Canada) by 2–3×.
    - For East Coast/Arctic access: entirely new multi-billion-dollar, multi-thousand-kilometre pipelines across Canada (politically toxic and never built at this scale).
    - Port upgrades, storage tanks, and marine infrastructure.

5. Overhaul regulations, politics, and financing

    - Fast-track environmental approvals, Indigenous consultations, and permitting (many past projects died here).
    - Federal/provincial incentives (tax breaks, carbon pricing relief for LNG).
    - Secure 20–40-year offtake contracts with European buyers (Germany, Poland, etc.).
    - Capital cost: Hundreds of billions of dollars. LNG Canada Phase 1 alone exceeded $40 billion including the pipeline.

    Electrify facilities with renewables/hydro to meet EU low-carbon standards (already a selling point for some BC projects).

6. Compete in the global LNG market

    - LNG is fundable. Even if built, Canadian gas might go to Asia (higher prices historically), with "*swaps*" indirectly freeing up U.S./Qatari LNG for Europe.
    - Canada's LNG is higher cost than U.S. Gulf Coast or Qatar due to remote locations, labour, and regulations. Europe's gas demand is also falling (renewables + efficiency), so long-term contracts are riskier.

Realistic timeline and outcome

- Short term (next 5 years): Canada will add 20–30 bcm/year of LNG capacity max. Helpful diversification, but nowhere near replacing Russia.
- Long term (10–15+ years): With heroic effort (policy U-turn, massive private investment, East/Arctic infrastructure), Canada

could theoretically supply 70–140 bcm/year. But Europe already replaced most Russian gas with U.S. LNG, Norway, and others by 2025—and is pushing renewables hard.

- Canada could have become a meaningful supplier and reduce Europe's dependence on any single source (including future Russian blackmail). It could have "prevented" Putin's leverage in 2022—the infrastructure of the U.S. LNG boom did most of that work instead.

In short, offsetting Putin's gas alone would require Canada to become one of the world's top 3–4 LNG exporters almost overnight on a scale it has never attempted. It is doable in theory **with decisive action**, but the practical, economic, and political barriers are enormous. Canada is already moving in the right direction with LNG Canada and a handful of projects—just not at the volume or speed needed to single-handedly fill the Russian gap or so we thought!

The Economic Impact

The abandonment/neglect/ignoring of these alternative projects has incurred substantial financial losses for Canada, estimated in the trillions of dollars. This includes both diminished foreign investment and the loss of significant construction labor hours. A recent article by Danielle Smith, Premier of Alberta, discusses some of the recent disparities associated with this issue. **Danielle Smith**: "**There is no global energy security without Canadian energy,** *Canada stands alone as a secure and dependable energy partner as the conflict in Iran upends supplies around the world."*

Alberta boasts the world's **fourth-largest recoverable oil reserves**, holding *more than 177 billion barrels of oil* that is **valued at more than $12 trillion** based on today's prices. Many are watching the current conflict in the Middle East with grave concern, and we hope that it can end as quickly as possible with minimal loss of life. But if it does not, there will be extreme hardship to follow. The conflict has already caused a severe energy

shortage, with shipping through the Strait of Hormuz at a standstill and energy fields being shut in. While nations around the world, including our friends and allies, struggle with this unprecedented energy crisis, *they are also seeking more secure and dependable energy suppliers*. But is there a solution to this greater issue of energy security?

Of the nine largest proven oil reserves in the world, five are in the Middle East conflict zone: Saudi Arabia, Iran, Iraq, Kuwait, and the United Arab Emirates. Two are politically unstable states: Venezuela and Libya. One is an undemocratic regime locked in a years-long war: Russia. But **one country remains untouched by conflict and stands alone as a secure and dependable energy partner — Canada.**

The solution is Canada. It should have always been Canada. It will always be Canada. **Alberta boasts the world's fourth-largest recoverable oil reserves**, holding more than *177 billion barrels of oil*. Albertans have advocated for some time that if Alberta — if Canada — does not supply the world's need for energy, *then anti-democratic regimes such as Russia will*. Begrudgingly, this reality we have warned against is playing out before our eyes in real time. Last week, a special deal was cut with India so that it can buy oil from Russia because it cannot get oil from its traditional partners in the Middle East, even though we know that Russia is taking those proceeds to fight a war in Ukraine. This should be unbelievable, but, unfortunately, it is a reality we have seen coming for some time.

A lost decade of stalled development under the leadership of Justin Trudeau has put Canada behind. His **anti-resource policies shut in Canada's production** instead of supplying our abundant natural resources to our friends and allies. If we had built pipelines instead of blocking them, we would have an additional 2.5 million barrels of oil a day in pipeline export capacity. Not to mention it would have also equated to an additional $21 billion in annual gross domestic product and $15 billion in annual revenues for provincial and federal governments.

But to Albertans, to industry, to Canadians and to our friends and allies, there is renewed hope that Canada will finally take its rightful place as a leading global energy superpower. After years of advocacy and

months of negotiations, the federal government has reversed most of its destructive, anti-resource policies — the "nine bad laws" — and agreed to recognize a new Indigenous co-owned oil pipeline to the West Coast as a project of national interest.

Driving me up the wall!

This one article highlights everything that drives me up a wall, and *why I am authoring this book!* First, the Premiere of Alberta is happy and proud that her bureaucrats have re-evaluated the Proven Oil Reserves for Alberta from 163 Bbbl to 177 Bbbl. That is an increase of 14 Bbbl or 8% approximately. It essentially moves our reserve number back to the level it was at twenty years prior. In a typical civil servant way CYA (cover your ass), they have come up with an *invisible number*. A positive number no doubt but carefully crafted to not garner too much attention. It probably took a fair number of people some time and committee work to justify their salaries and benefits. It satisfies the **status quo**. It shows that *Canada is following the same learning path that all of OPEC started on thirty years ago*. It is still the same statement, "Nice Boots!."

These silly servants followed protocol with the definition of "Proven Reserves," to the letter. Same O*ld Pile*, this article states, "Alberta boasts the **world's fourth-largest** recoverable oil reserves." Not just once, but twice, repeated just to prove a point. Why are we boasting something that is false. Most people would not be boasting if their team did not make the podium and could not even get the bronze medal! Typical Canadian response. Let me state, "There are only two countries with the possibility of **Super Proven Oil Reserves**, and they are Canada #1 and Venezuela #2". On our planet, if you are not counting Venezuela's Orinco and Alberta Oil Sands for *the largest oil reserves* you are nuts or stupid or both!

The article refers to "extreme hardship to follow" and an "unprecedented energy crisis," highlighting that if 20% of the world's daily oil supply from the Middle East remains untapped for even a few more weeks, global oil prices could soar to $200 or more per barrel. They knew this at the time they wrote this study, they did not re-evaluate their estimate of Proven Reserves. This is a huge error in judgement, even if they

use the excuse that they were just looking at that moment in time. It took them over twenty years to do a study on Proven Reserves, why produce a non-realistic number; that may be set forward to lasting another twenty years? A number so ridiculous that it was not worth publishing! They saw the price of oil spike to $120.00 per barrel, so if the world oil supply is cut 20% for another four weeks, we will see it start to rise to historic levels. They knew this and I would like you to look at one of the most important parts of our definition of **Proven Reserves**:

- **Commercially recoverable** — Extraction must be *economically viable using current technology, at prevailing prices and costs (as of the evaluation date*).

Western Canadian Select (WCS), a blend of heavy crude from Alberta's oil sands and other sources, priced at Hardisty, Alberta (often in US dollars per barrel). The past five months (from January 2025 to mid-March 2026) show significant volatility and a *strong upward trend in recent weeks*, influenced by global events (e.g., geopolitical tensions involving the US, Israel, and Iran, leading to spikes in broader crude markets). Key data points from reliable sources (Alberta government dashboard, Oilsands Magazine, Oilprice.com, and others):

Monthly averages (where available, primarily US$/bbl for WCS):

- January 2025: US$62.16.
- Recent data (mid-March 2026): WCS around US$83–86 (e.g., US$83.18 on recent quotes from Oilprice.com, **US $86.07 as of March 13** from Oilsands Magazine).

Current/recent spot (as of mid-March 2026): WCS at approximately US$83–86 per barrel (with some quotes showing +2–9% daily gains amid the rally).

This is a **38% increase** in price resulting from the Iran war. I can tell you that a 38% increase in value per barrel unleashes a whole lot more of the Oilsands as becoming *more economically viable*! If the price of a barrel of our oilsands were to become valued at around $140.00 USD per barrel (220 % increase in value) then that would have a huge impact

on what our Canadian probable reserves would then be considered *Proven Reserves*! The rest of the world would be doing the math and calling "Bullshit" to our undervalued number of 177 Bbbl of proven oil reserves. They would know the **real value of our proven reserves would be around 500 Bbbl.** That is a number that is not formulated with OPEC standards; I would set the bar far higher! Both the U.S.A. and China know and understand this already.

There has not been an accurate evaluation of what the damage is to all the oil and gas infrastructure in the middle east, over the past few weeks. They (collectively) have not finished dropping bombs yet and the oil production level before the war may take 5 to 10 years to achieve again depending on the final damage done.

This cartoon was originally published in 1915.

Doing the same thing, over and over again, expecting different results!

Not to single out just the Premier of Alberta, our Leader of the Loyal Opposition, Mr. Pierre Poilievre used an erroneous reserve rating in a recent interview on The Joe Rogan Experience (episode #2470), recorded around mid-March 2026, while Poilievre was in Texas. In clips and excerpts from that podcast, he states something along the lines of: "We have the fourth biggest supply of oil anywhere on earth" (or similar wording like "fourth biggest supply of oil beneath our feet"), emphasizing how Canada is underutilizing its resources due to policies, discounts on exports to the US, and no strategic stockpile. Other recent mentions include:

- A press conference on Parliament Hill in Ottawa (covered in video clips), where he said Canada has "the fourth biggest supply of oil in the world" while calling for a domestic energy plan.
- Social media posts and videos he shared (e.g., on Facebook, Instagram, LinkedIn, and X) repeating the point in the context of building a strategic reserve: "We have the world's fourth biggest supply of oil beneath our feet."

I had the distinct pleasure of listening to Mr. Pierre Poilievre at a rally in a helicopter hanger in Terrace, B.C. before the last election. I sat in the front row on his right. When he had finished his talk and answered all the questions he came directly over to me and shook my hand. Not wanting to miss such a wonderful opportunity I muckled onto his hand like a goose on a June beetle! His eyes grew big and I stated, “Hire Rex Murphy for President of the CBC”. I released his hand and as he continued along, he gave me a nod. Enough said, I had done my job!

Unfortunately, Mr. Rex Murphy passed away and will be sorely missed.

Chapter 7

United States

The United States and Canada share the **world's longest undefended border**, stretching approximately 8,891 km (5,525 miles) in total. This includes:

- About 6,416 km (3,987 miles) between Canada and the lower 48 U.S. states.
- About 2,475 km (1,538 miles) between Canada and Alaska.
- It relies on a long-standing tradition of *peaceful relations, trust, and cooperation* between the two countries rather than military deterrence.
- Security is overseen by civilian agencies (e.g., U.S. Customs and Border Protection, Canada Border Services Agency), with ports of entry, patrols, and monitoring focused on law enforcement, trade, immigration, and smuggling — not military defense.

In short, Canada and the United States hold this distinction by a wide margin. It is a notable symbol of their close alliance and peaceful coexistence.

On June 20, 1942, the Japanese submarine I-26 shelled the Estevan Point Lighthouse and associated radio/telegraph station on the west coast of Vancouver Island, British Columbia. The submarine fired around 17–25 shells (accounts vary slightly) at the facility from offshore. No one was injured, and damage was minimal (some reports note minor effects or none to the lighthouse itself), but it marked the first time since the War of 1812 that enemy forces (United States) fired on Canadian soil.

So, during the two years of WW2 before the US joined Canada to fight as an Ally; American companies and exporters sold significant volumes of strategic materials—particularly oil, scrap iron/steel, and other industrial goods—to Japan during the roughly two-year period from the

start of WWII in Europe (September 1939) until the Japanese attack on Pearl Harbor (December 7, 1941). However, direct sales to Nazi Germany were far more *limited and indirect*, especially after the war in Europe began. Trade with Japan relied heavily on the United States for critical war materials while fighting in China (since 1937) and expanding elsewhere:

- The U.S. was Japan's largest supplier of oil (providing 80–85% of its petroleum imports in the late 1930s/early 1940s) and a major source of scrap iron and steel (essential for steel production, as Japan lacked domestic resources).
- In 1939–1940, Japan imported tens of millions of barrels of oil annually from the U.S., along with large quantities of scrap metal, copper, and other commodities. These materials directly supported Japan's military machine, including aircraft, ships, and vehicles used in China and preparations for further expansion.
- U.S. policy initially allowed this under the Neutrality Acts (which permitted "cash-and-carry" trade in non-arms goods) and broader commercial interests. Exports continued even as Japan invaded French Indochina in 1940.

  cimsec.org Gradual restrictions began due to Japan's aggression:

- "Moral embargo" on aircraft/aviation materials (1938–1939).
- July 1940: Limits on aviation fuel, lubricants, and certain scrap iron/steel.
- October 1940: Broader scrap iron/steel embargo (except to Britain and Western Hemisphere).
- Full oil embargo (freezing Japanese assets and halting most petroleum exports) came in July–August 1941, after Japan occupied southern Indochina. This was a major escalation that strained Japan's economy and is often cited as a factor pushing it toward war with the U.S.

Until mid-1941, however, substantial U.S. oil and metal flows to Japan continued—meaning American materials helped sustain Japan's war

effort in the period leading up to Pearl Harbor. Trade with Nazi Germany, direct U.S. government-approved exports of war materials to Germany dropped sharply after September 1939:

- The Neutrality Acts (especially the 1939 version) and British naval blockade made large-scale direct shipments difficult or illegal for arms-related goods.
- American exports to Germany became minimal; much of what reached Germany came via neutral third countries or pre-existing arrangements.
- Some U.S. companies with subsidiaries in Germany (e.g., Ford, General Motors/Opel, Standard Oil, IBM, ITT, Alcoa, Dow Chemical) continued operations or provided technology, patents, or components that indirectly aided the German war machine. Examples include tetraethyl lead for aviation fuel, trucks, communications equipment, and aluminum. These were often through German-based plants rather than direct U.S.-to-Germany shipments.

By contrast, the U.S. increasingly supported the Allies:

1. Cash-and-carry sales favored Britain and France (who could pay and transport goods).
2. Lend-Lease (starting March 1941) provided massive aid to Britain, China, and later the Soviet Union—explicitly not "neutral" in effect.

My mother served with Atlantic Command in Halifax, N.S. during the second WW2. Many years later while on vacation in Honolulu she went to see the USS Arizona Memorial which spans the hull at the site of the sinking in Pearl Harbour. Surrounded by many Americans and Japanese tourists she made a profound statement to family members, “We were glad when we heard that the Americans had been bombed, we were losing the war, and it meant the US had to finally commit.”

"Selling to Both Sides"

- The U.S. was not officially neutral in action after 1939–1940; it tilted strongly toward the Allies while still allowing commercial trade with Japan until the 1941 embargoes.
- Critics sometimes describe this as "profiting from both sides," especially regarding corporate ties to Germany and oil/scrap sales to Japan. However, government policy shifted from strict neutrality/isolationism toward supporting democracies against Axis aggression.
- No evidence suggests the U.S. government actively armed Germany after 1939 in the way it did Japan via open exports until 1941.

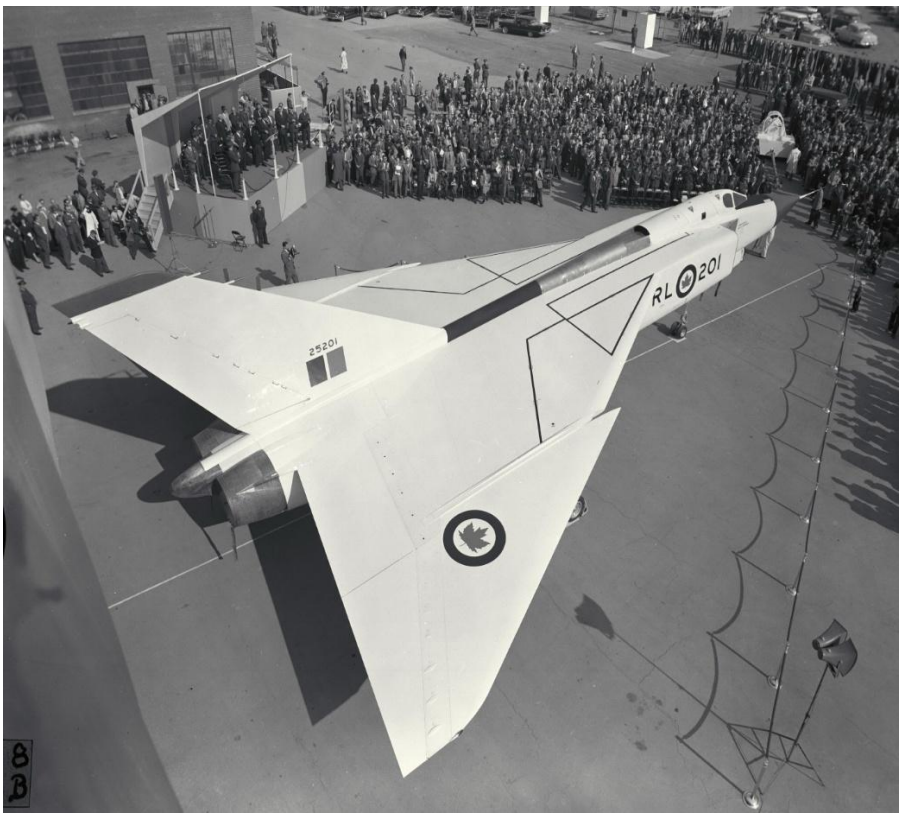
In short: Yes, for Japan (oil and scrap metal were key until the 1941 cutoff). Limited and mostly indirect for Germany (corporate subsidiaries and pre-war ties mattered more than government-sanctioned bulk sales). The two-year window saw a clear policy evolution from broad commercial trade toward economic pressure on Japan and open aid to the Allies. This remains a debated topic in histories of the road to Pearl Harbor, often framed as *economic warfare* contributing to Japan's decision to attack.

There were isolated incidents like U-boat landings of agents in the St. Lawerence area or a **weather station in Labrador (eastern Arctic-adjacent coast, 1943)**, and attacks on shipping near Newfoundland (e.g., Bell Island iron ore facilities).

Mayor Donald Trump has repeatedly joked (or half-joked, depending on the interpretation) about Canada becoming the 51st U.S. state throughout 2025 and into 2026, often tying it to trade disputes, tariffs, and defense spending. He has also accused Canada of freeloading on U.S. military protection, particularly regarding NATO contributions and border security. *abcnews.com* Here are some of the most notable recent or recurring comments:

- Trump has suggested that Canada could avoid tariffs and gain better military protection by joining the U.S. as the 51st state. In one statement, he said: “Therefore, Canada should become our Cherished 51st State. Much lower taxes, and far better military protection for the people of Canada – AND NO TARIFFS!”
- In a September 2025 speech to military officials, he claimed a **Canadian official called about joining a U.S. missile defense system (“Golden Dome”)**, and he replied: “Why don’t you just join our country? Become the 51st state and you get it for free.” He added that uniting the countries “makes a lot of sense.”

Déjà vu?



Avro Canada CF – 105 Arrow

He has described the U.S.-Canada border as an “artificial line” drawn long ago that “makes no sense,” arguing the combined land mass would be “the most incredible country visually.” He has also said he loves “O Canada” but suggested it could become the anthem for “one of our greatest states, maybe our greatest state.” During Canadian election periods in 2025, Trump posted messages wishing Canadians “good luck” while floating the 51st-state idea to eliminate the border, cut taxes, boost businesses, and provide superior military protection with “zero tariffs.”

Trump has returned to this type of insult many times, often in the context of ongoing trade tensions. Canadian officials, including former Prime Minister Justin Trudeau and Foreign Minister Mélanie Joly, have dismissed it as serious or taken it as an insult, with responses ranging from “not funny anymore” to calling it a strategy to pressure Canada economically.

He has criticized Canada for not spending enough on its military, calling us one of the lowest contributors to NATO and essentially relying on the U.S. for defense. He has linked this to broader complaints about trade imbalances and border issues (e.g., drugs, migration). He described Canada as “very bad to us on trade” and suggesting it should become a serious contender for the 51st state. Broader context from Trump and allies includes accusations that Canada is a “military free rider” under the U.S. defense umbrella, with pressure for Canada to reach (or exceed) the NATO 2% of GDP target. Tariffs have been framed partly to make Canada “pay its fair share.”

These remarks have fueled a trade war in 2025, with U.S. tariffs on Canadian goods (steel, aluminum, lumber, etc.) and Canadian retaliatory measures. Trump has used the 51st-state line both provocatively and as leverage in negotiations, though most analysts view it as rhetorical pressure rather than a literal policy goal. Canadian leaders across parties have firmly rejected any notion of annexation, emphasizing sovereignty. The comments remain a flashpoint, often resurfacing when trade, defense, or border issues arise. As of late March 2026, the rhetoric continues to irritate many Canadians while highlighting deep economic interdependence between the two countries.

Trump has repeatedly criticized Canada for what he describes as an unfair trade imbalance with the United States, framing it as Canada "ripping off" or "subsidizing" itself at America's expense. These comments intensified in 2025 and continued into 2026, often linked to his imposition of tariffs, threats of higher duties, and broader "America First" trade policy.

Key Recurring Claims by Trump

1. Trump has frequently claimed the U.S. has a $200 billion (or sometimes $200–250 billion) trade deficit with Canada, calling it a "subsidy" that the U.S. can no longer afford. He has said things like:

    - "We pay hundreds of Billions of Dollars to SUBSIDIZE Canada. Why? There is no reason. We don't need anything they have."
    - "The United States can no longer suffer the **massive trade deficits** that Canada needs to stay afloat."
    - "Canada has been very abusive of the United States for many years... it's a one-way street."

2. Official U.S. data shows the actual goods-and-services trade deficit with Canada was about $35.7 billion in 2024 (down from $40.6 billion in 2023). The goods-only deficit was around $70.6 billion in 2024 (and shrank further in 2025 under tariffs). Trump's $200 billion figure has been widely described as a **significant exaggeration (Bullshit Poker)!**

    The US$49 billion (2010–Sep 2025) is the closest rigorous estimate of Heavy Oil discount available and captures the era of major volatility and infrastructure challenges. Extending it modestly into late 2025–early 2026 would likely push the cumulative closer to US$50–55 billion (depending on exact volumes and recent narrower/wider months), but differentials have generally been

more moderate since TMX came online. That is a direct subsidy to the U.S. Refining Industry.

3. Trump has accused Canada of blocking U.S. exports while freely accessing the American market:
    - Restrictions on U.S. banks entering Canada.
    - Limits on U.S. farm products (especially dairy).
    - High tariffs on certain U.S. goods (e.g., claims of 250%–390% on dairy, though these are supply-management protections under USMCA that predate his second term).
    - Overall "unfair" practices making it a "one-way street."

4. Trump has justified tariffs on Canadian imports (e.g., 25% on most goods, 10% on energy in early 2025) to:
    - Reduce the trade deficit.
    - Force "reciprocity" and fairer treatment.
    - Protect U.S. industries like steel, aluminum, autos, and lumber.
    - Address secondary issues like border security and fentanyl (though little fentanyl enters via Canada).
5. He has tied this to his suggestion that Canada become the 51st state, arguing it would eliminate tariffs, lower taxes for Canadians, and provide better military protection—while making the "artificial" border disappear.

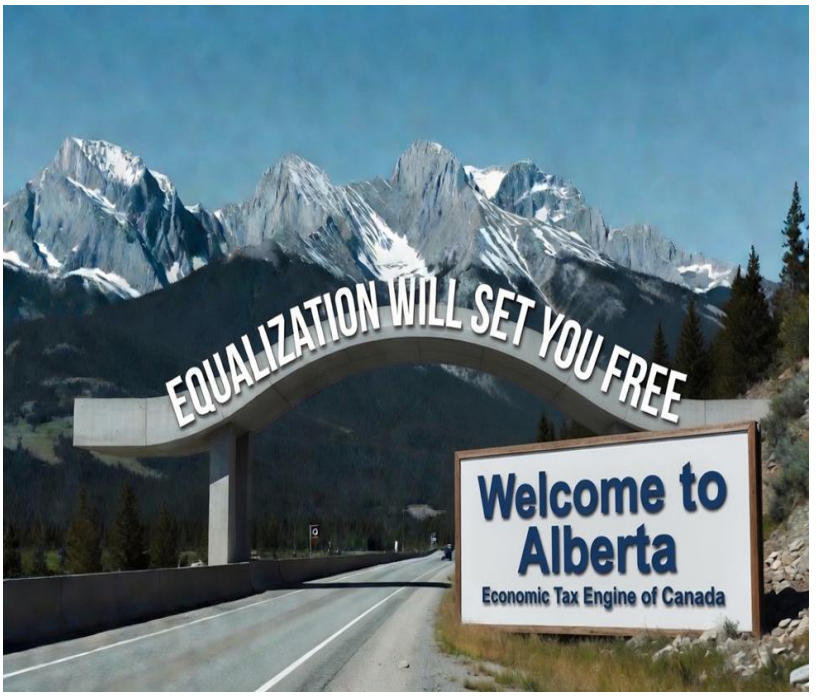
Context and Canadian Response

These statements have fueled a 2025–2026 trade war, with U.S. tariffs on Canadian goods (steel, aluminum, autos, etc.) prompting Canadian retaliatory measures. Trump has also threatened even higher tariffs (up to 100% in some scenarios) over issues like digital services taxes or closer Canadian ties with China.

Canadian leaders (Justin Trudeau and later Mark Carney) have rejected the claims as exaggerated or unjustified, arguing the integrated North American supply chains (especially autos and energy) benefit both sides and that the USMCA already provides a framework for fair trade. Economists note that trade deficits reflect broader economic factors (like U.S. consumer demand and savings rates) rather than simple "unfairness."

Trump's rhetoric on this topic has been consistent since his first term (when he renegotiated NAFTA into USMCA) but escalated after returning to office in 2025, using it as leverage in negotiations and to promote domestic manufacturing. In short, Trump portrays the U.S.-Canada trade relationship as chronically imbalanced and exploitative toward the U.S., using strong language like "abusive," "ripped us off," and "subsidy" to justify protectionist policies. The actual deficit figures are substantially lower than his cited numbers.

The Federal Government's Long-Term Plan for Alberta



This is what eastern Canada sees looking west to Alberta!

Chapter Eight

How Would Canada and Alberta be Perceived

This is an important question that will require cooperation from both federal and provincial governments if we want to change our current approach and perception from the rest of the world. Instead of relying on our typical "polite Canadian" image, we need to show the world—confidently and assertively—that we are prepared to take the lead as the Global Energy Superpower. It is not enough to simply claim this title; we must be able to demonstrate to all other oil-producing nations that **we possess 500 billion barrels of proven reserves**, and do so with confidence, pride, or even the boldness necessary to back it up. If others disagree (I suspect that there would be more resistance and squabbling coming from inside Canada, then any members of OPEC) they should provide factual evidence to support their stance or shut up!

However, this directly contradicts Mark Carney, the current Prime Minister, who has not specifically advocated for Canada to keep its oil reserves untapped as an independent policy. nationalpost.com Instead, the claim widely circulated in Canadian political discourse (especially by critics like Pierre Poilievre and Conservative MPs) refers to his broader views on global climate goals. These appear in his 2021 book Value(s): Building a Better World for All and in public remarks (such as at COP26 in Glasgow). Opponents apply them to Canada because of its large proven oil reserves (particularly the oil sands) and Carney's past comments on pipelines, carbon pricing, and the need for a "just transition" away from high-emission fossil fuels. "He is clear that *globally, around one half of all oil reserves will have to be left in the ground*, if the world is to live within its carbon budget."

The book discusses Canada's energy resources positively but stresses that the oil sands remain higher-cost and more polluting than some alternatives, requiring further innovation and a managed transition. Carney stated: "Maybe as much as half of oil reserves, proven reserves need to stay in the ground if we're going to get to where we want." This aligns with his broader advocacy for limiting fossil-fuel expansion to meet Paris Agreement goals and avoiding excessive global warming. Context and political framing:

- These are global figures tied to carbon budgets and net-zero science, not a Canada-specific directive to "keep it in the ground."
- Critics frame them as anti-Canadian energy policy because Carney (as Bank of England governor, UN climate envoy, and later Liberal leader/PM) has supported carbon pricing, opposed certain pipeline projects in testimony, and emphasized that not all proven reserves can be burned.

In short, the "50% (or half) of oil reserves need to stay in the ground" line—global in origin but applied to Canada's reserves in domestic debate—is the statement referenced from his book and public remarks. No verbatim quote says, "Canada must leave its oil in the ground," but that is how it is frequently summarized in political attacks.

Carney's statements could benefit from further clarification. He could specify that his comment— "He is clear that globally, around one half of all oil reserves will have to be left in the ground, if the world is to live within its carbon budget"— was intended to reference the global oil reserves of OPEC countries generally. Clarifying that Canada was not specifically included in this context, but rather addressing a broader international audience, possibly concerning nations with different human rights records or varying degrees of trust, would provide valuable context. This could help his past associations buy and build more oil pipelines not just in the U.S.A., but here in Canada as well.

This would then provide the means to sell more Carbon Credits Taxes, to help the "Justin" transition, away from high-emission fossil fuels. It would occur to me that the fund manager Carney, who advised Justin all along has had a bigger plan, even before his book came out. Let us take a closer look at this:

- Carney (former Bank of Canada and Bank of England governor, and as of 2025, Canada's Prime Minister in this context) is frequently described in modern commentary as a "technocrat" due to his background in finance, central banking, and preference for expert-driven, data-informed policymaking. However, this is a generic use of the term "technocrat" (meaning rule by technical experts or

bureaucrats) and has **no connection** to the specific 1930s energy-based Technocracy movement.

- No biographical or historical sources link Carney or his family to Howard Scott, Technocracy Incorporated, the Energy Survey of North America, or the energy certificate system. His career centers on mainstream economics, climate finance, and global institutions, not the radical continental planning or abolition of the price system advocated in the 1930s.

The only prominent modern familial link to the 1930s Canadian branch of the movement is through **Elon Musk**: his maternal grandfather, Joshua Norman Haldeman, was a leader in the Saskatchewan section of Technocracy Incorporated in the late 1930s and was arrested in 1940 when the group was briefly banned in Canada. Haldeman later became disillusioned and moved his family to South Africa.

While the Trudeau family pursued energy and economic policies that emphasized federal planning (especially Pierre's NEP), and while Carney embodies a contemporary *technocratic style*, neither has any family, ancestral, or direct personal ties to the 1930s Technocracy movement itself. Claims otherwise appear to stem from loose associations of the word "technocracy" or political rhetoric rather than historical evidence.

The Technocracy movement (also known as Technocracy Incorporated or simply "Technocracy"), which gained significant popularity in the United States and Canada during the 1930s, especially amid the Great Depression en.wikipedia.org had as its core ideas: It advocated replacing elected politicians and business leaders (the "price system" based on money and profit) with a government run by scientists, engineers, and technical experts—often called "technocrats." These experts would *manage society and the economy scientifically for maximum efficiency, using data, planning, and technology rather than politics or markets*.

I must point out a **fundamental flaw** to the founder's basic assumptions! Scientists, engineers, and technical experts during the 1930's

typically had a different name during that time, they were called MEN. Anyone who tries to tell me that women did not have a say (going back to Cave Man days) in what was going on did not know my grandmother! I can see why this movement went *out of style* so to speak!

At its heart was an "energy theory of value": The movement argued that energy (measured in units like ergs or joules) was the fundamental common denominator underlying all production and consumption. Money would be abolished and replaced with energy certificates (or "energy distribution cards") issued equally to citizens. These non-transferable, non-saveable certificates would allocate a share of the continent's total energy production, with goods and services priced according to the energy required to produce them. This was meant to eliminate waste, ensure balanced production and consumption, and provide a high standard of living without scarcity-driven economics. That would definitely, get your pantyhose in a knot!

Key Figures and Origins

- Howard Scott, an engineer and the movement's main leader and spokesman, revived and popularized the ideas. He and colleagues conducted an ambitious "Energy Survey of North America" from Columbia University to quantify continental energy flows and support their proposals. Influenced by earlier thinkers like Thorstein Veblen (who wrote The Engineers and the Price System).
- A notable early associate was M. King Hubbert (later known for the "peak oil" theory), who helped develop the Technocracy Study Course and *energy certificate* concepts.

The movement envisioned a unified "Technate" covering much of North America (from Panama to the North Pole, including the US, **Canada**, and parts of Mexico and Central America) as a single continental unit managed by a "Soviet of Experts" or *board of technicians*. It promoted ideas like a shorter workweek, automation, and apolitical governance by expertise. (This last statement about **governance by expertise** is the definition of an oxymoron).

Technocracy peaked in the early-to-mid 1930s, attracting hundreds of thousands of followers (including many engineers, students, and professionals) through study groups, lectures, and publications. It competed for attention with other Depression-era movements but faded later in the decade due to internal issues (e.g., Scott's overstated credentials), lack of a clear political strategy, and the rise of the New Deal and World War II. It never achieved political power but left a mark on discussions about technology, planning, and energy in society.

The movement is distinct from general "technocracy" (rule by experts), which has broader historical roots, but the 1930s version specifically emphasized the energy-based system and engineer-led continental management. Its ideas occasionally resurface in discussions of resource planning, sustainability, or critiques of market economies.

I would draw comparisons between Energy Certificates and Carbon Credits. Both are meant to re-distribute wealth. Different origins but resulting in the same results. So, if I wanted to skim 5% off the top of all energy consumed I might set up a global network that would issue something called a carbon credit. I may want to start off in a country where I could control the mainstream media easily and start my implementation in small steps. Of course, if there was a global disaster like a pandemic it might greatly speed along this **great reset**.

It has been stated that Mark Carney does not personally control, issue, or directly trade carbon credits. There is no public evidence that he owns or operates carbon credit registries, brokers, or projects himself. However, his substantial past compensation and ongoing financial interests at Brookfield Asset Management (where he served as Vice Chair, Head of Transition Investing, and later Chair from 2020 until January 2025) are directly tied to large-scale investments in technologies and assets that generate revenue from—or benefit significantly from—the carbon credit and carbon pricing system.

Primary Mechanism: Carried Interest and Performance Pay from Brookfield’s Transition Funds Carney co-led (and helped raise capital for) Brookfield’s flagship Brookfield Global Transition Funds (BGTF I raised

US$15 billion; BGTF II raised a record US$20+ billion). These are *among the world's largest private funds* dedicated to the "energy transition" and net-zero investments.

As a co-manager, he is entitled to carried interest—a standard performance-based bonus (typically 20% of profits above a hurdle rate after investors are paid). Bay Street sources and Brookfield disclosures indicate this could be worth tens of millions of dollars, depending on fund performance. He is also eligible for a "notional long-term incentive plan" tied to these funds.

How carbon credits factor in:

- The funds invest heavily in carbon capture and storage (CCS) (e.g., Brookfield put US$300 million into Entropy Inc., a major Canadian CCS company), renewables (solar, wind, hydro), battery storage, nuclear services, and decarbonization technologies.
- CCS projects generate carbon credits or offsets in both compliance markets (e.g., Canada's industrial carbon pricing system, Alberta's TIER program, or similar schemes) and voluntary markets. Companies pay for these credits to meet emission caps or net-zero claims.
- Renewables and other low-carbon assets benefit from carbon pricing (higher costs on fossil fuels make clean energy more competitive) and can produce avoided-emission credits or offsets.

carboncredits.com Stronger carbon markets, higher carbon prices, or government incentives for CCS/renewables (which Carney has officially supported as UN Special Envoy and in Canadian policy) increase the financial returns on these projects → higher fund profits → higher carried interest for Carney. Other Financial Ties:

- Stock options: As of late 2024 (just before he left for politics), Carney held Brookfield options valued at more than US$6.8 million. Their value rises with Brookfield's overall performance, which includes its massive renewable and transition portfolio.

bloomberg.com Broader Brookfield exposure: The firm has billions deployed in transition assets globally. Success in carbon-credit-generating or carbon-price-sensitive projects boosts asset values and management fees.

Policy Role as Prime Minister (2025–present) and Potential Indirect Benefits Carney has recused himself from direct dealings involving Brookfield and over 100 related entities under Canada's ethics rules. However, his government's policies—scrapping the consumer carbon tax while expanding industrial carbon pricing mechanisms, supporting CCS incentives, and signing energy MOUs with Alberta that emphasize carbon capture—create a favorable environment for exactly the kinds of projects Brookfield funds target.

msn.com Critics (including opposition MPs and think tanks) have highlighted these as potential conflicts, arguing the policies could enhance returns on Carney's deferred compensation. Carney maintains decisions are made in the national interest and subject to ethics oversight.

medium.com Carney's overall net worth is estimated at roughly US$7 million (far below billionaire levels), built from Goldman Sachs, central banking salaries, and Brookfield compensation—not from personal carbon-credit speculation. The carried interest is the clearest link to the carbon system.

timesofindia.indiatimes.com In short, Carney's money from the carbon credit/pricing ecosystem flows indirectly through institutional performance pay at Brookfield, where his funds own and develop real-world projects that monetize credits, offsets, and decarbonization incentives. This is standard for transition investors and fully disclosed in Brookfield filings, but it has drawn scrutiny given his dual roles in climate advocacy and politics. There is *no public record* of him personally buying/selling credits or *controlling the market itself*. He doesn't have to since he is directing public policy towards future wealth.

IRAN war Longer Term

I am looking ahead a few months, and I am not seeing the Iran war slowing down. The threats are getting more desperate and it would appear the Gulf infrastructure is becoming more at risk. Ultimately it may take years or decades for these critical infrastructures to be repaired, replaced or if those countries will even attempt if their resources are due to run out in the next 15 to 20 years.

It is important for Canada to demonstrate a commitment to establishing itself as a leader in the global energy sector. The entire world will be asking for our oil in the next year and continuing for decades to come. Why let the Americans step into this void that they have helped to create? This is an opportunity for Canada to stand up to the "**Nasty Countries and States**" and compete with our *heavy oilsands Bigger Barrels*, for every dollar spent on building new world oil capacity and for every future dollar spent on oil production until the other energy technologies are ready to compete <u>without</u> subsidization. It will be intriguing to observe whether they (OPEC) choose to invest their resources in reconstructing oil-driven economies or decide to shift towards Solar, Hydro, Hydrogen, or pursue Windmills and World Peace.

For the record, I consider myself more of an environmentalist *realist* than those often labeled as "Greenie Meanies" or members of the "Mother Nature crowd." Throughout my years working in the Canadian oil industry, I encountered many likeminded oilfield workers who believed we needed to do more to protect the environment. For example, we used spill mats under our trucks when on site, stayed mindful of our actions, supported our companies' environmental policies well before *foreign groups* began intervening or funding opposition groups and NGOs had begun to attack our industry.

More Fractured Fairy Tales

I would like to tell some twisted tales from my journeys across Canada which I think can explain some of the perceptions about Canada and how we ended up here in the present. Let us go back to when I transferred myself to St. John's, NFLD in the later part of 1982. Pierre Trudeau had just crushed Alberta with his NEP, and the only place with active exploration was off Nova Scotia and Newfoundland. There was still some activity up in the Canadian Beaufort Sea.

This was just after the Ocean Ranger semi-submersible oil drilling rig sank in a winter storm off Hibernia. Our related companies lost seven people in that disaster, and my division was getting DST tool strings ready to ship out for a test program. I put in for a transfer with my company and spent several years testing the high flow rate oil wells off Hibernia, eventually I ended up testing the well that the Ocean Ranger had drilled.

Newfoundland has a very distinctive, colorful culture. If you ever go there and try to talk with an old timer from an "Outport," you will swear they were talking a different language. I learned many things in those years; one was about seal hunting on the pack-ice. This was an important fishery and at that time provided extra cash for many families, the seal fur was used for women's fashion around the world. This was seasonal work and very tough and dangerous. I can remember watching the television and seeing a show where the Sea Shepherd II (founded by former Greenpeace member Paul Watson) conducted a major disruption campaign in the Gulf of St. Lawrence in April 1983, using their ship Sea Shepherd II to blockade sealers and document the hunt. The 1983 EEC ban was the direct result of years of cumulative **activism and bad press**.

While that ban put an end to the hunt, it also stopped revenue not only for fishermen along the east coast, but also for all the native and Inuit communities in the north who relied on the extra income for other furs and crafts. These people and communities had no say or anyone to listen to them. It put all of Canada in a bad light internationally.

A few years later, when observing the oil sands, tailing ponds, the landscape appeared grim—there is simply no amount of lipstick to make them look appealing. These are huge open scars uglier than ugly! These bodies of water are byproducts of washing the Oilsand to extract heavy oil, leaving behind toxins and fine particles suspended in the water. This environment poses health risks to migrating waterfowl. The mining companies set up *propane scare cannons* during the annual migrations to drive the birds away from these small lakes. Migrations may vary by a week or two. The Scare Cannons are taken indoors during the winter months and moved out to their normal positions each spring. Normally this procedure works well but due to unfortunate circumstances, one spring they were not set up properly and many waterfowl landed on the tailings ponds and became extremely ill with a lot dying. The news media moved to the shoreline and pictures of "Dead Ducks" went viral over the world. A simple solution would have been to hire some hunters and supply them with shotgun shells, and they could have scared the birds away! A twenty-dollar solution to save the reputation of all Canadians and our wonderful oilsands resource!

I remember seeing those pictures on all the news channels and thinking this is not going to end well for the oilsands' reputation. We were *all going to be dead ducks*! It was the seal hunt scenario all over again, Canada has not recovered to this day. I knew that not enough was being done and what little effort that was put forward, needed a more coordinated professional approach. Then disaster 2.0 happened!

Ed Stelmach the Premier of Alberta did not initiate the invitation for James Cameron to visit the Alberta oil sands. The primary invitation came from First Nations leaders, particularly George Poitras (former chief of the Mikisew Cree First Nation from Fort Chipewyan), who wanted Cameron to see the environmental impacts and downstream effects firsthand.

What Stelmach did after Cameron publicly criticized the oil sands (calling them a "black eye" on Canada's environmental record earlier in 2010) and expressed interest in visiting, Stelmach's government responded positively.

Timeline:

- Cameron wrote a letter to Stelmach outlining his planned three-day trip (starting September 27, 2010), requesting assistance to tour operations, meet oil executives, and schedule a meeting with the premier and Energy Minister Ron Liepert.
- Stelmach's office accommodated the request, helped facilitate industry tours (including helicopter flyovers of mines and tailings ponds), and arranged the in-person meeting in Edmonton on September 29.
- Stelmach even rearranged his schedule (swapping planes for a red-eye flight if needed) to ensure he could meet Cameron personally. Stelmach's motivation was strategic engagement and public relations:
- He viewed the visit as an opportunity to present the positive side of the oil sands: economic benefits, job creation (in Alberta, Canada, and the U.S.), technological improvements, and Alberta's commitment to responsible development and a cleaner energy future.
- Industry and government saw it as a chance to counter negative narratives by showing Cameron the operations directly rather than letting him rely on critics' accounts. The consensus was: "invite complainants up and show them around."
- Stelmach aimed to influence Cameron's perspective (and, by extension, public/media opinion) through "quiet diplomacy," emphasizing facts over criticism. He planned to highlight how oil sands wealth supported jobs and economic growth, very naive.

The meeting itself was described as respectful and gracious by both sides, though Cameron emerged still calling for stricter regulations, slower expansion, better inclusion of First Nations, and independent scientific reviews. He did not fully change his views but acknowledged the dialogue. Stelmach "invited" or hosted the meeting/tour elements as an initiative-taking response to Cameron's self-initiated fact-finding trip, not as the

original instigator. The goal was defensive PR: engage a high-profile critic, highlight the industry's side, and mitigate potential damage from his celebrity influence on environmental debates.

James Cameron's post-visit views on the Alberta oil sands (immediately after his September 2010 tour) were more nuanced than his pre-visit stance, but he **remained strongly critical** of the pace, scale, and management of development while acknowledging some realities of the resource.

Key Points from Cameron's Statements (September 29–30, 2010)

- Not as black-and-white as before: He explicitly said the issue was no longer as simplistic as he had thought from pictures and environmental briefings. He no longer described the oil sands outright as a "black eye" on Canada's record (his April 2010 comment), though he still saw major problems.
- A potential "gift" or "curse": He repeatedly framed the oil sands as an incredible resource that could be a great economic gift to Alberta and Canada (including energy security by **reducing reliance on OPEC/Middle East oil**), but only if managed properly. Without better practices, it risked becoming a curse. He stated it was "going in the wrong direction" at the time. latimes.com Call for a slowdown and stricter controls:
    - Halt approvals of new toxic tailings ponds until better technology and science are available.
    - Conduct independent, transparent scientific studies (not industry-funded) with proper peer review and public oversight.
    - Slow the pace of expansion to allow time for better environmental practices.

Strong emphasis on First Nations involvement: He stressed including Indigenous communities (especially downstream groups like Fort Chipewyan) in decisions from the start, noting their health and water quality concerns. He stood with First Nations leaders at his Edmonton press conference.

Pragmatic on fossil fuels as transitional: He recognized that *stopping oil sands development entirely was neither practical nor desirable* in the short term, as the world would continue burning fossil fuels during the shift to renewables. He preferred North American-sourced oil over imported sources for security reasons but urged aggressive movement toward renewables.

Impressions from the tour: he was **horrified** by the scale of open-pit mines and tailings ponds but noted some positive aspects (e.g., impressed by Syncrude's biodiversity reclamation efforts, describing it as a "movie-director kind of problem"). Overall, he found the reality "as bad or worse" than he expected in many ways.

Tone and Meeting with Stelmach, Cameron described his meeting with Premier Ed Stelmach as gracious, polite, and respectful, though they "agreed to disagree" on several points. He appreciated the government's positive outlook on economic benefits but used the opportunity to raise his concerns constructively.

He vowed a "life-long commitment" to advocating for better management and Aboriginal rights and indicated he would continue following the issue *(though he did not dramatically reverse his environmentalist perspective*). In summary, the visit moderated Cameron's rhetoric slightly—he became more willing to see economic and transitional value—but reinforced his core calls for independent science, slower development, better regulation, and Indigenous inclusion. He left convinced that stronger government oversight was needed to prevent long-term environmental and social harm. These views were expressed in his September 29, 2010, Edmonton press conference and follow-up interviews (e.g., with **TIME** and **Reuters**). There are no major documented shifts in his public stance in the immediate years afterward; he largely

moved on to other projects while maintaining his broader environmental activism.

NOTE:

The movie **Avatar** (directed by James Cameron) was released on December 18, 2009, in the United States. His visit to Canada several months later was more of a *press opportunity to promote his movie*! If steady Eddy had seen this movie, he would have noted that there was a striking similarity between the huge metal bulldozers on an alien planet and the giant machines up in Fort Mac. There was no way Cameron was going to change his view! I heard about the plan to take this foreign movie producer up to the **Tar Pits;** excuse me I got confused between the heavy dirty oil production around Los Angeles and their tar pits and our **Oil Sands**. Where Canadians wash dirty sand, remove oil, and then put the clean white sand back in place and reforest the mining areas. I watched this slow-moving train wreck when it was happening and knew how it would turn out. My family had lived through a similar predicament decades before and I watched my dad in the exact same position as Eddy.

Environmental Protection in the USA

I was operating out of Casper, Wyoming with our real-time, remote operated DST system; we had a test to do on a medium depth well in a different state. The test objective was to evaluate the properties of a permeable zone for a contaminated water disposal well. Normally fresh water is associated with near surface zones less than five hundred meters in depth. Quite often any water found any deeper is normally salty.

There were two zones of interest, and the best one was at a depth of 2,200 meters, unfortunately this zone flowed fresh water with better quality than most tap water! A reservoir at this depth would be ancient water. We felt like it was a failure since no-one in their right mind would pump contaminated water down into a pristine ancient reservoir of fresh

water. This major industry was going to be hard pressed to keep their disposal costs down.

Almost ten years passed and the geologist from that wellsite sent me an e-mail unexpectedly asking if we were still doing tests in the USA. I had closed that operation down years before, but while I was talking to him, I asked about that disposal well we had evaluated and what was the company's solution? He straight up told me that they went ahead and started pumping contaminated water into that zone. Seems there were some state politics and jobs on the line.

Tentative Oil Spill clean up off the East Coast

During the later part of the last century, I was testing a wildcat exploration well a couple of hundred miles offshore. Part of the design parameters for this test string called for 4,000 meters of the drill pipe to be filled with diesel fuel, to act as a cushion to the reservoir when we flowed the well. It was a dead zone, and the drill pipe was tripped out on the way to retrieve the test string back to surface. The American Oil Company made the decision not to recover the volume of diesel we put in the pipe to save rig time. The 100+ barrels of diesel ran over the drill floor every time we popped a stand and then fell into the ocean.

It was a sunny calm day with no wave action. You could see an oil slick on the surface the width of the moon pool going off and over the horizon as far as the eye could see! I was younger then so my eyes could see a long way! The oil company rep got on the radio to the standby supply vessel; he gave the order to do aggressive maneuvers with the offshore supply tug to break up the slick.

The supply vessel then accelerated and started doing figure eights downwind from the drilling platform. That was a weird sight to see, the supply boat was leaning so far over the prop was cavitating near the surface! The captain kept doing these maneuvers for ten minutes, for sure there were pots and pans flying around the galley and every crew member on that boat was holding on for dear life. It had no effect; it just made the oil slick wider as it drifted off towards the horizon.

The process for changing the Perception of Canada's "Bigger Barrel":

1. It would start with the co-ordination of our oil producing Provinces in stating the case that **we have 500 Bbbl of Proven Reserves**, the largest on Earth.

2. Once there was consensus, an announcement would be made of our position to the world, and maybe to our friends in the "Ottawa Bubble"?

3. Following this, announcements would be made regarding at least three pipeline projects to tidewater, specifying the intended oil markets, identifying the **partners** involved in each project, and detailing the amount of *financing* provided by each party.

4. Shovels in the ground within four months on all projects.

5. In lock step, the Alberta Oil Sands would be ramped up to fulfill the increase in demand for our oil. Whatever it would take to develop as quickly as we can, so we can fill the void left from those middle east facilities, *which were blown up and burned*, faster than they can rebuild. It would be a 'Rat Race' to get oil flowing with long-term commitments and severe penalties for breaking these supply agreements (sort of like the hydro agreements with NFLD).

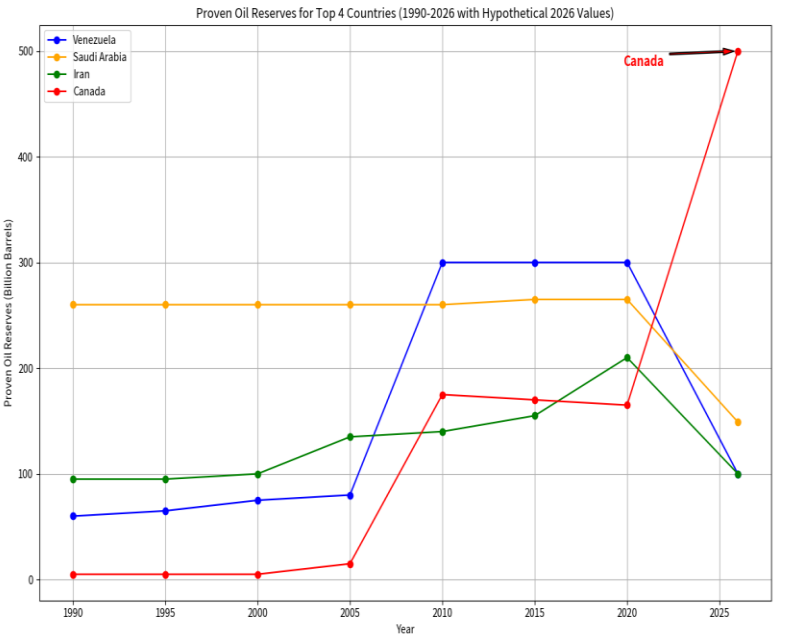
6. Canada would have to continue ramping up production, refining and pipelines to salt water so that we always have excess production capabilities, so we control the world supply of oil narrative instead of OPEC and more recently Mr. Magnificent Trump.

Chapter 9

The Energy Superpower of the World

500+ Billion Barrels of <u>Proven Oil Reserves for Canada</u>

			2025	2026	Years left
Heavy Oil Producers				*Estimates*	
1 st	**Canada**	**Oil Sands**	177 Bbbls	**500+ Bbbls**	**300**
2nd	Venezuela	Heavy Oil	303 Opec	100 Bbbls	100
Conventional oil producers					
3rd	Saudi Arabia	Light Crude	267 Opec	149 Bbbls	30
4th	Iran	Light Crude	208 Opec	100 Bbbls	22



With the new estimates for Proven Oil Reserves shown on the right-hand column (2026) and Canada ranked 1ST in the world, you can see that

the next three on the list totaled together only come to 349 Bbbls (these three producing countries together *only* come up to 70% of Canada's Proven Oil Reserves).

We have listed the top proven oil reserves by type of oil produced for each country. For the potential oil reserves of the two countries that produce unconventional oil (Heavy Crude). The A Group (Canada and Venezuela), which have the greatest provable oil reserve potential and would not face depletion for over a century.

This is not a path for *weak individuals or governments*. It would take a cohesive effort with acceptance of a common goal. Canada would have to step up and act like a Nation, showing the courage and fortitude of our forefathers: building the national railway across Canada, Vimy Ridge during WW1 and every heroic deed that will be required of every worker who dedicates their time and effort to again forge a nation of builders.

That is a lot to ask the newer generations and recent guests who reside here in Canada. Some may be looking for a free ride from their parents, governments and not be willing to do the hard work or commitments for time. Fortunately, this is Canada and we must show the opportunity, growth, and happy lifestyle to all the young people across Canada living in their parents' basements that we are still a nation of builders.

I would point out that the Americans likely already know Canada has the largest reserves. If they know, then China and Russia likely know as well. I also assume the Prime Minister has been informed, given his close ties to China. The only people who are not aware are the Albertans! They are the ones who need to know the most.

Now that you've read this book, you can evaluate the facts for yourself. Canada's proven oil reserves may begin at 177 Bbbls, but how would you assess them? You do not have to accept my estimate of 500 Bbbls—if you disagree, what figure would you choose instead? For the sake of argument, what if we added the word "ethical" to every definition used in oil reserve calculations?

A few Canadian facts:

Canada ranks among the top countries worldwide for natural resource wealth, often placed in the top five when measuring the total estimated value of reserves (around $33 trillion based on recent analyses from sources like Statista and Visual Capitalist data up to 2024-2025). This places it ahead of countries like Iran, China, Brazil, and Australia. Canada's strength comes from its diverse and abundant reserves across energy, minerals, timber, and other resources. Here are the key ones where it ranks in the global top five or even #1, based on reserves, production, or both (drawing from Natural Resources Canada, Statista, USGS equivalents, and recent reports):

- Oil (proven reserves) — **#1 globally** (around 500 billion barrels, largely from Alberta oil sands/bitumen, ahead of Venezuela and Saudi Arabia *by my calculations*).
- Potash — #1 worldwide in both reserves (largest globally, 1.1 billion tonnes) and production (global leader).
- Uranium — #1 or #2 in reserves (often cited as #1), and among the top producers (typically top five, often #2).
- Nickel — Top 2-5 in reserves and production (often #2 in reserves).
- Freshwater — #1 or #2 (holds 20% of the world's accessible freshwater resources/surface water).
- Timber/Forests — Top 3-5 globally in forest area and timber reserves (vast boreal forests).
- Natural Gas — Top 10 in reserves and production (leading producer).
- Gold — Top 5-10 in production and reserves.
- Palladium — Top 3-5 in production.

- Aluminum - The newly announced aluminum deposit refers to the Thor Project by Canadian Energy Metals Corp. (CEM), announced in late January 2026 (with a Preliminary Economic Assessment released around January 29, 2026). It is located near Tisdale in east-central Saskatchewan and is described as a major shale-hosted alumina resource (alumina is the key intermediate for producing aluminum metal, typically derived from bauxite ore elsewhere).

Approximately 49.5 billion tonnes of ore, containing 6.8 billion tonnes of alumina (Al_2O_3).

- Inferred Resource (additional, less certain): 86.6 billion tonnes of ore.
- This covers only about 23% of the total property area (roughly 600 km² or 230 square miles for the estimated portion), with potential for significant expansion.
- The company and provincial officials (including Premier Scott Moe) have called it one of the largest known deposits globally and a potential "game changer" for North America's aluminum supply chain, as Canada currently imports nearly all its alumina (mostly from China).
- Note: This is alumina content (recoverable aluminum oxide), not raw bauxite ore. Traditional aluminum deposits are bauxite (which averages 40–60% alumina), so direct comparisons require context. Comparison to Worldwide Deposits/Reserves. World alumina reserves are tied to bauxite deposits (the primary global source). According to sources like the USGS and industry reports:
- Global bauxite reserves are estimated at around 30–55 billion tonnes (with recoverable alumina content varying by grade, but roughly 20–30% alumina on average across deposits).

- This translates to global recoverable alumina reserves in the range of 7–15 billion tonnes (estimates vary; some older figures put bauxite reserves at 27–30 billion tonnes, implying 8–12 billion tonnes alumina equivalent).

The largest bauxite (aluminum) reserves by country include:

- Guinea: 7.4 billion tonnes bauxite (largest share globally).
- Australia: 6–7 billion tonnes bauxite (top producer, with high-grade deposits).
- Canada: The Thor Project's 6.8 billion tonnes of contained alumina (measured + indicated) represent roughly a third of the world's known alumina supply/reserves, per statements from CEM CEO Christopher Hopkins and multiple reports. Canada is a global leader in critical minerals essential for clean energy/tech (e.g., nickel, cobalt, lithium potential), and it is the #1 country for mining equity financing worldwide. These rankings position Canada as a major resource powerhouse, with energy (especially oil sands) often the highest-value category, followed by minerals and timber. The country's vast landmass and responsible production practices enhance its strategic importance globally.

A few Albertan Facts:

- Oil (proven reserves) — #1 globally, around +500 billion barrels, largely from Alberta oil sands/bitumen (over 90%), (ahead of Venezuela and Saudi Arabia *by my calculations*).

- Alberta Oil Sands - at current rates of production - gives us a 230-year supply of oil.

- Had the blocked pipelines of the last ten years been constructed, there would be an extra 2.5 million barrels per day available for oil exports. Realistically that number would have been more than double at around 5 million barrels per day. At $120.00 CDN per barrel that would be $600,000,000 dollars per day lost!

- 500 Bbbl Reserves – divided by five million people (population of Alberta) equals 100,000 barrels each and at $120.00 per barrel that would be a valuation of twelve million Canadian dollars for every man woman and child in the province of Alberta. With that kind of bankable resource wealth under their feet, they should not squabble over how much Canada Pension Fund they are owed! They could accept whatever the east was willing to fight over and give the balance to the rest of Canada as a super equalization donation!

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NOTE: I used Super Grok, 2026, to check my information. I have left references in the text and included these where relevant. Most of the information is from my personal experience. Analysis and projections are my own.

Acknowledgments

The first person I want to thank is Mr. Gary A. He spent much of his career as a civil servant and always brought insightful perspectives to conversations about his department. Our walks around the local lake were often filled with lively debates, especially on topics like Income Trusts or Immigration. I remember regularly playing devil's advocate—choosing the most contentious side of any debate.

For instance, when a major drilling company considered converting to an income trust, I argued it was a poor decision given the drilling sector's dependence on the unpredictable boom-and-bust cycles of oil and gas, which were further complicated by OPEC politics and interference from eastern Canada. Gary, however, maintained that while the structure was valid, it simply shifted tax burdens onto individual investors. Many times, before joining Gary for a walk with the coyotes along the lake, I would sit in my car thinking of the most outrageous current topics and take a position on them to challenge him with before proceeding. Preparedness for me was key to an enjoyable debate.

There are many other people who have helped me with various issues that arose in drafting this book. Some were current and others were from the distant past. Too many to mention here.

About the Author

Mr. Ron Craik is an accomplished oil and gas services professional with 40+ years of firsthand experience in drilling, well testing, completions, and hydraulic fracturing optimization. He began his career as a rig hand in 1976 and progressed through technical, sales, and business development roles, including multiple periods with Schlumberger Canada Ltd. (Johnston Testers). Founded Horizontal Well Testing Ltd., developing patented, electronically controlled horizontal DST systems that enable selective zone testing in horizontal laterals. Expertise centers on improving well economics by identifying productive intervals before multi-stage fracking—reducing unnecessary stimulation, water usage, costs, non-productive time, and environmental impact while boosting recovery factors. Strong advocate for data-driven, targeted completion strategies in shale and tight formations.

He worked in the Banking industry, managed supply bases for Deepsea Oilfield Services on the east coast and was involved with the original Downhole Systems Technology Ltd. (Dave Sask, inventor) tool string and wet connect, which the HWT system was based on when it was further developed. He has worked for various other companies and projects from Africa, South America, and the North Sea. He holds one Canadian patent, four US patents and has another U.S. Patent for a new wireline tractor-less system for making wet connections down a horizontal wellbore.

Professional Experience

Established and managed a firm offering an innovative, patented, horizontal drill stem testing (DST) system, designed for use on drill pipe or tubing

- Developed and commercialized electronically controlled, remotely operated tools controlled in real time from surface via wireline and laptop—delivering quick, accurate downhole pressure, temperature, and fluid data.

- Introduced the Advanced Recovery Logging Tool (RLT)—the only system capable of measuring fluid densities in the drill pipe post-DST to distinguish drilling mud, water, or oil with high confidence.
- Promotes selective stage/zone testing prior to fracturing to optimize stimulation placement, achieving industry-leading 99%+ DST success rate.
- Tools support re-fracking applications and real-time recovery evaluation; positioned the company as a leader in cost-effective, lower-impact horizontal well evaluation.
- Provided technical sales, operational support, and client solutions for well testing and perforating services across Canadian onshore and offshore projects.
- Supported business growth in equipment maintenance and data systems (parallel to oil & gas expertise) for aerospace industry.
- 1976 onward: Began as rig hand on Precision Drilling Rig 2 while self-funding university education; gained broad field experience in drilling and service operations across Alberta and beyond.

Patents & Technical Innovations

- Holder of one Canadian patent and multiple U.S. patents (four issued) related to downhole testing tools, power/communication systems, recovery logging, and equipment data management.
- Here is a compiled list of Canadian and US patents he holds: one Canadian patent and multiple US patents, primarily in two categories:
- Equipment inspection/maintenance data systems (often RFID/memory button-based, with applications in **aviation and cross-industry, including military**).
- Oil & gas downhole tools for horizontal wells (focused on power, communication, operation of tools in horizontal wellbores, and related testing/fracking optimization).

- Primarily Issued 2006–2013) These relate to systems for storing and retrieving equipment inspection and maintenance data using memory buttons/probes and central databases. They were central to the 2013 patent infringement litigation against Boeing.
- US7076532B2 — System and method for storing and retrieving equipment inspection and maintenance data
  Inventor: Ron Craik
  Filed: 2001-11-13 (priority 2001-01-15)
  Issued: 2006-07-11
  Abstract: Involves read/write memory buttons on equipment (e.g., aircraft components) linked to a remote database for technical and historical maintenance data, accessed via portable computer/probe.
- US7383318B2 — Continuation of the above; same title.
  Issued: 2008-06-03.
- US8198986B2 — Continuation/family member; same title.
  Issued: 2012-06-12.
- US8564417B2 — Continuation/family member; same title.
  Issued: 2013-10-22.
- These form a patent family with related publications (e.g., US20020095476A1, US20080228347A1). The patents are method-focused on data management for inspection/maintenance.US Patents (Oil & Gas / Downhole Tools)
- US9297215B2 — System and method for providing power, two-way communication, and operation of **downhole tools in a horizontal wellbore** (related to the Canadian counterpart below).
  Issued: 2016-03-29.
  Focuses on wireline extensions, wet connects, and tubing strings for powering/operating tools (e.g., DST, logging) in horizontal sections.
- CA2804281C — System and method for providing power, two-way communication, and operation of downhole tools in a horizontal

wellbore.
Granted: 2018-04-24.
Abstract/Description: Addresses challenges in horizontal wellbores by using wireline extension assemblies, wet connects (electrical plugs in wet environments), and tubing strings to deliver power, two-way data communication, and operation of downhole tools. Enables positioning and repositioning tools in the horizontal leg without expensive alternatives like E-coil tubing or tractors. This supports selective zone testing, real-time data, and optimization in horizontal drilling/fracking.

- Key oil & gas innovations: Complete system of electronically controlled, remotely operated DST tools (straddle inflate design unique to the industry) for horizontal wellbores.
- Real-time wireline-operated systems for precise zone evaluation.
- Earlier patents (e.g., in RFID-based equipment inspection/maintenance data systems for aircraft and missiles) demonstrate cross-industry expertise (aero space) in smart data solutions.
- Horizontal & multi-stage Drill Stem Testing (DST)
- Real-time downhole data acquisition & remote tool control
- Selective zone testing for fracking optimization in horizontal wells
- Well completion, re-fracturing, and recovery logging
- St. Mary's University, B. Com. education (self-funded through Rig & Coal Mine work).
- Low public digital profile focused on technical contributions rather than self-promotion.

Ron having another difficult day.

Lower Dyke, Kitimat River just across from LNG Canada facility.

This was my redundant Oilfield Service truck that I drove around Calgary in 2018.

No Business case for Canada to build pipelines to help the world!

(It had banners on the sides as well)